Citation: Van Mol v. Ashmore
1999 BCCA 0006

Date: 19990112
Docket: CA022042
Registry: Vancouver

COURT OF APPEAL FOR BRITISH COLUMBIA

BETWEEN:

MELANIE ANN VAN MOL,
PHILLIP FREDERICK C. VAN MOL, and
SANDRA LYNN VAN MOL

PLAINTIFFS
(APPELLANTS)

AND:

DR. PHILLIP GODFREY ASHMORE

DEFENDANT
(RESPONDENT)

Before: The Honourable Mr. Justice Lambert
The Honourable Mr. Justice Goldie
The Honourable Madam Justice Huddart

J. D. McAlpine, Q.C. and
H. A. Mickelson — Counsel for the Appellants

C. E. Hinkson, Q.C.
and C. Rusnak — Counsel for the Respondent

Place and Date of Hearing — Vancouver, British Columbia
25, 26 and 27 May, 1998

Place and Date of Judgment — Vancouver, British Columbia
12 January, 1999

Written Reasons by:

The Honourable Mr. Justice Lambert

Concurring Reasons by:

The Honourable Madam Justice Huddart (p.77, para.140)

Dissenting Reasons by:

The Honourable Mr. Justice Goldie (p.80, para.146)

Reasons for Judgment of the Honourable Mr. Justice Lambert:

I

I N D E X

[1] For convenience of cross-reference I have divided these reasons into the following Parts:

II

THE NATURE OF THE CLAIM

[2] The claim by Melanie Ann Van Mol against Dr. Ashmore rests on two grounds.

[3] The first ground is that Dr. Ashmore was negligent in embarking on a surgical procedure to remedy a narrowing of Melanie's aorta without a system of prophylactic protection available or in place to reduce the risk of haemorrhaging and the risk of cutting off the circulation of blood to her spine and lower body for a period which would create a very significant possibility of permanent paralysis of her lower limbs.

[4] The second ground is that Dr. Ashmore was negligent in failing to inform Melanie of the material risks and the special or unusual risks of the contemplated surgical procedure, and in failing to permit Melanie to participate, through seeking a second opinion or otherwise, in the decision about which of three or more available surgical alternatives should be adopted in her case.

III

AN OUTLINE OF THE TRIAL PROCEEDINGS

[5] The claim was put forward over 35 days of trial. Melanie gave evidence on her own behalf. Her father, who was her guardian ad litem when the action was begun, also gave evidence, and so did her mother. Dr. Sett and Dr. LeBlanc, who were participants in the operation, were called as witnesses on behalf of Melanie. Dr. Patterson, who was involved in Melanie's care for many years as a pediatric cardiologist, and Dr. Ashmore, the pediatric cardiac surgeon in charge of the operation, gave evidence as defendants. Expert evidence was presented by both sides. Dr. Gillis, Dr. Cornel, and Dr. Miyagishima were called by the plaintiffs. Dr. Penkoske and Dr. Trusler were called by Dr. Ashmore.

[6] Madam Justice Kirkpatrick conducted the trial. Her reasons occupy 65 pages. They are available on QuickLaw at [1996] B.C.J. 1199. The facts and her conclusions from those facts are very fully set out in her reasons. I do not propose to summarize those reasons. I will assume that anyone interested in these reasons will be familiar with Madam Justice Kirkpatrick's reasons. I will confine my references to the trial judge's reasons to points which are relevant to my consideration of the precise issues in this appeal.

[7] Madam Justice Kirkpatrick dismissed the action entirely. She addressed both grounds of claim. She heard evidence about the assessment of damages but made no assessment. After her reasons were delivered the parties joined in a submission requesting that damages be assessed, but Madam Justice Kirkpatrick declined to make the assessment.

IV

THE STANDARD OF REVIEW

[8] The task of a Court of Appeal in a negligence appeal has been addressed a number of times by the Supreme Court of Canada. There was no disagreement between counsel on this appeal about the scope of the function of a Court of Appeal. The questions that are open for examination by an Appeal Court were put in this way by Madam Justice McLachlin for a unanimous nine-judge panel of the Supreme Court of Canada in Toneguzzo-Norvell v. Burnaby Hospital, [1994] 1 S.C.R. 114 at p. 121-122:

> It is now well established that a Court of Appeal must not interfere with a trial judge's conclusions on matters of fact unless there is palpable or overriding error. In principle, a Court of Appeal will only intervene if the judge has made a manifest error, has ignored conclusive or relevant evidence, has misunderstood the evidence, or has drawn erroneous conclusions from it.... A Court of Appeal is clearly not entitled to interfere merely because it takes a different view of the evidence. The finding of facts and drawing of evidentiary conclusions from facts is the province of the trial judge, not the Court of Appeal.
>
> . . .
>
> I agree that the principle of non-intervention of a Court of Appeal in a trial judge's findings of fact does not apply with the same force to inferences drawn from conflicting testimony of expert witnesses where the credibility of these witnesses is not in issue. This does not however change the fact that the weight to be assigned to the various pieces of evidence is under our trial system essentially the province of the trier of fact, in this case the trial judge.
>
> (my emphasis)

[9] So the relevant questions for a Court of Appeal in relation to arguments on issues of fact are:

1. Is there a palpable and over-riding error?
2. Is there a manifest error?
3. Has the trial judge ignored conclusive or relevant evidence?
4. Has the trial judge misunderstood the evidence?
5. Has the trial judge drawn erroneous conclusions from the evidence?

[10] I think that the first two questions must come to this: A Court of Appeal is not to retry the case as if it were assessing the evidence for itself and reaching its own conclusions. It must defer to the trial judge's findings and conclusions on questions of fact, not simply because the trial judge is in a better position to assess the quality of the oral evidence by observation of the witnesses, but also because the law assigns the making of the findings of fact to the trial

judge, and, unless the findings are shown to be wrong, they must stand and must be accepted by a Court of Appeal.

[11] So a Court of Appeal must decide whether the trial judge's findings and conclusions of fact have been shown to be wrong in a way which either must have altered the result or may well have altered the result. Surely what is meant by the descriptive adjectives "palpable" and "manifest" must be that the error can be identified and can be shown to be an error. The importance of identifying the error is stressed in Beaudoin-Daigneault v. Richard, [1984] 1 S.C.R. 2 at p. 9. Surely, also, what is meant by the adjective "over-riding" must be that the error is one which either must have altered the result or which may well have altered the result.

[12] I think that the third, fourth and fifth questions must represent examples of specific kinds of palpable, manifest and over-riding errors in relation to the treatment of the evidence. So the questions confronting the Court of Appeal in relation to suggestions that the trial judge ignored or misconceived relevant evidence, or drew wrong conclusions from it, must still be whether the error can be identified and can be shown to be an error, and whether the error is one which either must have altered the result or may well have altered the result.

[13] Sometimes a trial judge may state a piece of evidence in his or her reasons in a way which is clearly incorrect. But much more often the appellant's argument rests on the fact that the trial judge omitted to refer to a piece of evidence that was relevant to a conclusion or finding of fact. Such an omission is not itself an error unless the circumstances are such that the omission must give rise to a reasoned belief that the trial judge must have forgotten, ignored, or misconceived the evidence in a way which affected his or her conclusion. More usually, the omission is only one factor in the overall task facing the Court of Appeal in relation to questions of fact. The task is one which the Court must face, whether the particular evidence is referred to in the trial reasons or not. That task is to decide whether, on the basis of all the evidence, there was a body of evidence which was properly, judicially, and reasonably capable of supporting the conclusion which the trial judge reached.

[14] As I have said, the parties to this appeal did not disagree about the nature of the task that was before the Court on this appeal.

V

MELANIE'S MEDICAL HISTORY

[15] Melanie was born on 8 November, 1973 with a narrow section (a coarctation) in her aorta. The diagnosis was made by Dr. Patterson, then a pediatric cardiologist at Vancouver General Hospital, who has continued to be involved in Melanie's cardiac care. Unless remedied, such a narrowing creates increased risks to life and health. When Melanie was two years old, in 1975, she underwent a surgical procedure of patch aortoplasty to repair the coarctation, at Vancouver General Hospital. The surgery was performed by Dr. Ashmore. It was designed to widen the narrow part of the aorta by opening it up and sealing it with a permanent patch. Some significant narrowing remained after that operation and when Melanie was six, in 1979, she was operated on, a second time, for a second coarctation repair by graft patch aortoplasty. Again Dr. Ashmore was the surgeon. However, the problem remained serious enough to require further intervention. In 1987, when Melanie was thirteen, a third procedure was undertaken. This time it was decided, after consultation between Dr. Patterson and Dr. Ashmore, that a balloon angioplasty would be attempted in an effort to widen the aorta without surgically exposing it. Dr. Patterson performed that procedure. Still the problem remained. It continued to be a threat to Melanie's long-term health and to her life expectancy.

[16] At a cardiac surgical conference ("rounds") on 13 March, 1989, a conclusion was reached that a third aortoplasty or coarctation repair was to be recommended for Melanie. Dr. Ashmore was regarded as the surgeon responsible for surgical procedures to be performed on Melanie. By then he was the senior pediatric cardiac surgeon at B.C. Children's Hospital. Dr. Ashmore was present at the conference when the decision was made and so were Dr. LeBlanc, an experienced pediatric cardiac surgeon at B.C. Children's Hospital, and Dr. Patterson.

[17] There were several potential problems with the projected surgery, all of which were recognized at the "rounds". First, as in all coarctation repairs the aorta would have to be isolated, clamped and dissected, but the scarring and adhesions which would have been left from Melanie's previous two operations would make that isolation and dissection time-consuming and difficult. Second, the aorta itself might be particularly fragile (or "friable") as a result of the first two operations and the balloon angioplasty. Finally, the collateral circulation, or the means by which Melanie's system naturally re-routed blood flow around the coarctation, might not be sufficient to keep up an adequate supply of blood to her lower body for the duration of the surgery.

[18] On 30 March, 1989, Dr. Patterson wrote to Melanie's parents with the recommendation arising from the "rounds" conference on 13 March that a third surgical repair be carried out. The surgery was scheduled for the summer of 1989. Melanie was admitted to B.C. Children's Hospital on 27 August, 1989, for the third attempt at surgical repair of the coarctation, but the surgery was cancelled because of a labour dispute. The surgery was rescheduled and cancelled a number of times over the next several months. Melanie was re-admitted to

B.C. Children's Hospital on 22 February, 1990 and, after one final postponement, the surgery took place on 26 February, 1990. Melanie was then aged sixteen years and three months.

VI

THE OPERATION

[19] Dr. Ashmore's plan for the operation was to enter the chest through the old incision on the left side at the base of the fourth rib and to follow a direct path to the coarctation site where he proposed to expose and free a sufficient length of the aorta to insert a clamp around it. He then proposed to test whether the collateral blood supply to the spine and lower limbs was such that the spine and lower limbs could come through the operation unimpaired. If it was not, then he proposed to use a Gott Shunt, essentially a tube which would be inserted above the coarctation site and below the coarctation site in the aorta and which would allow a flow of blood to bypass the coarctation site and support the spine and lower body. Once the flow of blood was assured, the coarctation would be repaired by a patch or a tube, and the operation would be concluded.

[20] Dr. Ashmore began the operation in accordance with his plan. He was assisted by Dr. Sett, a cardiac surgical resident. It took 89 minutes to reach and expose the coarctation site in the aorta. Dr. Ashmore said the adhesions were a major problem and a lot of vascular adhesions needed to be divided before the aorta could be exposed. Dr. Ashmore also said that the proximal aorta was extremely thin-walled and that meant that dissection had to be done very carefully. After the aorta was exposed a clamp was passed across the aorta. As that was being done a tear was created in the posterior wall of the aorta, and Melanie started to haemorrhage. From that point on, the main focus of the operation was to repair the tear and control the haemorrhage; the lack of control over the aortal laceration and the compromised position of the aorta meant it was no longer possible to consider the insertion of a Gott Shunt. The aorta had only been partially freed from its surrounding adhesions, and there was not enough room to move the clamp further up it. Dr. Ashmore opened the aorta and tried to repair the tear from inside, but failed.

[21] Dr. LeBlanc, who was present in the hospital, heard of the problem confronting Dr. Ashmore and went to help. He arrived between 90 and 110 minutes after the tear had occurred. Dr. LeBlanc decided that more aorta had to be isolated so that the position of the clamp could be changed. He took control of the changed procedure, and after a sufficient amount of the aorta had been freed he inserted a 30 mm tubular graft which had the effect of remedying both the tear and the coarctation. The operation was then concluded.

[22] Melanie's collateral blood flow was never measured, and obviously no Gott Shunt or bypass machine had been used. By the time the operation was over, the blood flow to Melanie's

spine and lower limbs had been cut off for approximately two hours and fifteen minutes.

[23] Melanie has never recovered the use of her legs. She has a non-functional flaccid paraplegia. She has bowel and bladder control but is confined to a wheelchair. She also suffered injury to her recurrent laryngeal nerve. That has left her with a somewhat hoarse voice which she has difficulty in modulating. No evidence relating to the effectiveness of the coarctation repair was referred to in the course of argument in this appeal, but it was said that Dr. LeBlanc's intervention in the operation may well have saved Melanie's life.

[24] At an interdisciplinary meeting held on 9 March, 1990 at B.C. Children's Hospital, Dr. Ashmore spoke to many of those involved in Melanie's care about the surgery and about Melanie's future care. Nurse Cook, a clinical nurse who is a nurse specialist in cardiac surgery and who was involved with Melanie throughout the procedures of 1989 and 1990, took notes of the meeting. She said she took them as accurately as possible. Her record of the meeting describes those present, recalls Dr. Ashmore's report about his consultations with the neurology team about Melanie's prognosis, discusses a plan involving care and treatment of Melanie at the G.F. Strong Rehabilitation Centre, then sets out an explanation given to the group by Dr. Ashmore about his rationale for not using a cardio-pulmonary bypass in Melanie's surgery, and concludes with an approach to take with Melanie's care. Dr. Ashmore said, in evidence, that the report prepared by Nurse Cook was not accurate and that he could not have said what she reported him to have said.

[25] The policy of the surgical staff of B.C. Children's Hospital was to prepare a report of each operation within 48 hours after it took place. That policy was instituted by Dr. Ashmore. Melanie's operation took place on 26 February, 1990. Dr. Ashmore's surgical report of the operation was dictated on 4 May, 1990, more than two months after the operation, and was transcribed three days after that.

[26] Dr. Ashmore was 64 years old when he operated on Melanie on 26 February, 1990. He had just had his 70th birthday when he testified in 1996. He retired shortly after this operation, perhaps on reaching his 65th birthday. He had had a very distinguished surgical career. Dr. Ashmore was succeeded as Chief of Pediatric Cardiac Surgery at B.C. Children's Hospital by Dr. LeBlanc who still held that position at the time of trial.

VII

THE CONDUCT OF THE OPERATION: THE FIRST GROUND OF CLAIM

[27] Once it had been decided that some surgical intervention must occur if Melanie was to be safeguarded from heart difficulties and a shortened life expectation, and once it had been decided that a third coarctation repair was the best form

of surgical intervention, the remaining questions related to the method of coarctation repair. There is no disagreement between the parties in this case about whether surgical intervention had to occur, or about whether coarctation repair was the best form of surgical intervention.

[28] The point that divides the parties with respect to the first ground of claim is whether it constituted negligence to carry out the coarctation repair in Melanie's case, where there had been two previous coarctation repair procedures and an angioplasty, leaving a high risk of very serious adhesions to dissect, and a highly fragile aorta, without a system of prophylactic protection available or in place to reduce the risk of cutting off the circulation of blood to Melanie's spine and lower body for a dangerous length of time.

[29] Dr. LeBlanc, in his evidence, described the three possible surgical alternatives for carrying out the coarctation repair on Melanie in this way:

I made the point this morning that there is a difference between techniques and options. When you repair a coarctation you have three techniques, which is to cross-clamp the vessel without anything else; to cross-clamp the vessels with bypass, meaning the heart/lung machine; or to cross-clamp the vessels with the Gott Shunt. These are three techniques to repair this.

The cross-clamping without anything else is the most straightforward method. If no problems are anticipated, it is commonly used. Where there may be problems the alternatives available are the cardiopulmonary bypass or a more limited bypass, or the use of the Gott Shunt.

[30] A cardiopulmonary bypass requires the presence of a heart-lung machine and operators for the machine, one of whom is known as a perfusionist. The machine can be made available hooked up and ready to begin work, on standby, or at various stages in between. There is some risk associated with using a bypass. Particularly, the patient must be "heparinized", that is, given a blood-thinning agent to avoid the formation of clots either in the machine or in the patient's own circulation. If haemorrhaging were to become a problem there would be a risk of excessive bleeding, so the heparinization would have to be reversed with a drug called Protamine and the bypass discontinued. There were at least two methods of bypass described in the evidence. In one, oxygenated blood is pumped from the left atrial to the lower body by means of an incision in the groin and an insertion of a tube into the femoral artery. This form of bypass only requires use of the "heart" function of the heart-lung machine. A more complete bypass, called a "fem-fem" or femoral vein to femoral artery bypass, could also be used. This form of bypass takes deoxygenated blood from a tube inserted in the patient's femoral vein, oxygenates the blood, and returns it to the patient's femoral artery where it recycles around the lower body. The patient's

own heart and lungs are thus cut off completely from the lower body, and both parts of the heart-lung machine are used.

[31] The bypass machine reduces the risks of spinal cord damage during an operation by ensuring a steady flow of oxygenated blood to the spine and lower body while the aorta itself is cross-clamped. Risk of spinal cord damage increases swiftly with the length of time that the spine is denied blood. So in operations made more difficult and time-consuming by the presence of dense adhesions and a friable aorta, the availability and use of a bypass machine would have particular value in risk-reduction.

[32] The Gott Shunt requires the insertion of the top of the shunt higher up the aorta than the coarctation site, and the insertion of the bottom of the shunt below the coarctation site and so creates an immediate bypass of the coarctation site. The two insertions are made into the aorta at places where the aorta should be comfortably strong, but the extra dissection and the incisions in the aorta produce risks associated with the use of the Gott Shunt.

[33] Dr. Ashmore's plan for the operation contemplated cross-clamping without anything else. It required that a test be made immediately after the clamping to determine whether sufficient blood was being carried to the spine and the lower limbs by collateral blood vessels already developed over time to cope with the coarctation. If the test indicated sufficient blood on an appropriate blood gradient then the operation would proceed to repair the coarctation by a patch or a tube. If the test indicated that there was not sufficient blood on an appropriate blood gradient then the Gott Shunt would be inserted by further dissection and incisions in the aorta before returning to the repair of the coarctation. In short, it was not part of Dr. Ashmore's plan of the operation to use the Gott Shunt prophylactically before cross-clamping, but to use it in order to ensure blood supply only if the blood supply was not naturally sufficient.

[34] It was the plaintiff's position at trial, and continued to be the plaintiff's position on the appeal, that Dr. Ashmore's plan for the operation was not an appropriate plan for Melanie, having regard to her medical history, and that Dr. Ashmore was negligent in putting the plan into effect without the prophylactic protection of either a bypass machine or a Gott Shunt inserted before cross-clamping.

VIII

THE CONDUCT OF THE OPERATION: THE EVIDENCE

[35] Seven doctors, including Dr. Ashmore and Dr. LeBlanc, gave evidence which bore on whether a bypass machine or a Gott Shunt should have been used prophylactically in this operation.

[36] Dr. Ashmore had himself performed 500 to 550 primary coarctation repairs, between 40 and 45 secondary coarctation

repairs, and two third coarctation repairs. I understand that none of those patients died, though general mortality rates for those operations are between 5% and 15%. Melanie is the only one of Dr. Ashmore's patients who suffered spinal cord injury.

[37] Dr. LeBlanc only considered Melanie's case on one occasion before he joined the surgical team during the operation in progress on 26 February, 1990. That previous occasion was at the time of the "rounds" surgical conference with respect to Melanie on 13 March, 1989. In Dr. LeBlanc's evidence about that conference, given both on examination for discovery and at trial, he said: first, that the presence of dense adhesions and the thinness of the aorta were both anticipated in the course of the conference; second, that it was his expectation that either a Gott Shunt or a bypass machine "should" be used prophylactically during this third coarctation repair operation on Melanie because of the anticipated presence of dense adhesions and a thin or friable aorta at the coarctation site; and third, that he suggested to Dr. Ashmore that a form of prophylactic protection should be used in Melanie's operation. Dr. LeBlanc would himself have used a cardiopulmonary bypass because that was the technique which he had been trained to use and which he was accustomed to using.

[38] In the course of his evidence at trial, Dr. LeBlanc was asked about the risk of paraplegia from a third coarctation operation. I will set out the question that he was asked and the answer that he gave:

Q Now, could I take you then back to your examination for discovery that Mr. McAlpine read to you, the second volume. He read to you question 638, among others, and that question is relative to the risks of paraplegia. Question is -- he asked if "those risks were something that were known to you before 1990?":

> A Oh, yeah,they're the same risk in the range of one to three per cent.

Now, where do you get the one to three percent from?

A The risk of paraplegia in patients that have arch problem varies from .4 to .5. in a patient with coarctation and good supply, to 3 to 4 percent as the patient gets older or -- and has had previous coarctation repair. So in a baby, the risk is very minimal. On an older patient with large collaterals the risk is minimal. On a patient that has a second, a third, a fourth operation the risk will increase slightly.

(my emphasis)

[39] Dr. Gillis was called on behalf of the plaintiffs. He was Chief of Surgery at the Isaak Walton Killam Hospital for Children from 1963 to 1994 and Chairman of the Dalhousie Medical School from 1989 to 1993. He was experienced in coarctation repair and recoarctation repair. It was his opinion that in the context of Melanie's third coarctation operation, in the anticipated circumstances, the immediate availability of cardiopulmonary bypass was required, and it was imprudent for a surgeon to go ahead with the third coarctation operation to the extent that Dr. Ashmore did without more appropriate protection.

[40] Dr. Cornel was called on behalf of the plaintiffs. He specialized in pediatric, cardiac and thoracic surgery at the Janeway Child Health Center in Newfoundland and then at the Children's Hospital of Eastern Ontario in Ottawa for the thirteen years before the trial. Dr. Cornel said, in relation to the operation technique, that it was his opinion, given the surgical hazards, that Dr. Ashmore should not have proceeded without spinal cord protection in place. He said that some surgeons do use a Gott Shunt prophylactically in secondary coarctation repairs as opposed to a heart/lung machine.

[41] Dr. Miyagishima was called on behalf of the plaintiffs. From 1970 to the time of trial he had been a member of the surgical staff of St. Paul's Hospital in Vancouver and from 1989 to 1993 he had been Head of the Division of Cardiovascular and Thoracic Surgery at St. Paul's Hospital. In his report he said this:

> In reviewing the transcript, it appears that the surgeon relied substantially on his skill and previous experience to approach this case. These two qualities are extremely important. Nevertheless, I believe the standard of care required a surgeon in the circumstances of this case to anticipate the difficulties which can occur and to have a protective mechanism in place.
>
> In a situation where a left thoracotomy is undertaken and if it is apparent that the aorta at the site of the coarctation is difficult and hazardous to dissect due to scarring, adhesions and friability and if the 'Gott' shunt cannot be inserted and if the heart/lung machine is not readily available then, it is prudent to stop the operation and close the chest, discuss the situation with the patient and parents and, if agreeable, rebook for another time when all the ancillary protective devices are available.
>
> (my emphasis)

[42] Dr. Trusler was called on behalf of the defendant. He was for many years a pediatric cardiovascular surgeon and, at the time of trial, had just retired as Head of the Division of Cardio-Vascular Surgery at the Hospital for Sick Children in Toronto. Dr. Trusler described Dr. Ashmore's plan for

Melanie's third coarctation operation as a reasonable plan, in keeping with good medical practice. He said it was the way in which many surgeons would manage a patient like Melanie. He said that a prophylactic support was only used when a patient had special problems and that there was no evidence that Melanie had the kind of problems which would warrant the use of prophylactic support.

[43] Dr. Penkoske was called on behalf of the defendant. She is a cardio-thoracic surgeon and was then a Clinical Professor in the Department of Pediatrics and Surgery at the University of Alberta Hospital. In her report she said that the third coarctation repair on Melanie by Dr. Ashmore was conducted in a manner that met the accepted standard of practice of a pediatric cardiac surgeon in 1990. It was Dr. Penkoske's opinion that a prophylactic femoral artery bypass, any other type of bypass, or a Gott Shunt, were not required in Melanie's case.

IX

THE CONDUCT OF THE OPERATION: THE TRIAL JUDGMENT

[44] Madam Justice Kirkpatrick reached her conclusion on the first ground in a segment of her reasons headed "The Standard of Care". She went through portions of the medical evidence and stated her conclusion in these passages:

> [103] In Melanie's case, there was what Dr. Trusler described as the "major danger" of dissection up to the point of cross-clamping of the aorta, prior to the fine dissection necessary to effect the repair. That period of "major danger" passed uneventfully. The thrust of the evidence establishes that the relative speed with which Dr. Ashmore was able to complete the dissection to the point of cross clamping of the aorta was indicative of the relative ease of dissection, even in the presence of difficult and dense adhesions.
>
> [104] The various views expressed by all the surgeons, and which is reflected in the medical literature, make it plain that the decision is not simply one of shunt or no shunt; or patch aortoplasty, or jump graft, or interpositional graft. The evidence is clear that every option available to the surgeon (be it an operative approach or a mechanism for spinal cord protection) carries with it positive and negative features. The mere fact that so many procedures are available and are considered appropriate in the repair of recoarctations is perhaps the best proof that there is no one accepted school of medical thought as to the best operative approach.
>
> [105] Based upon all of the evidence, I conclude that there was, in 1990, no one acceptable operative

procedure nor one accepted method of ensuring protection of the spinal cord in the repair of a third coarctation. Indeed, from the review of the various expert opinions and the medical literature discussed by the doctors at trial, it is evident that there are several acceptable operative procedures and acceptable approaches for the protection of the spinal cord. Further, it is clear that Dr. Ashmore's operative approach was one of several acceptable approaches consistent with an established body of medical opinion.

. . .

[110] Considering the very extensive and complex medical evidence heard in this case, I conclude that Melanie's condition involved difficult and uncertain questions of medical treatment, as evidenced by the conflicting schools of thought on the best approach to repair a recoarctation and to ensure adequate spinal cord perfusion. At a superficial level, and with the clarity of hindsight, it may seem obvious that cardiopulmonary bypass might have protected Melanie's spinal cord and prevented her paraplegia. But if one assesses the circumstances of Melanie's extensive medical history, Dr. Ashmore's intimate knowledge of her medical circumstances, the operative site as it was known in January, 1989 and as it presented in February 1990, the risks and benefits of the various approaches, and Dr. Ashmore's skill and knowledge as a surgeon, the decision to employ spinal protection prophylactically is not, as required by ter Nuzen, "obvious nor readily apparent." Furthermore, I am unable to conclude that "the obvious and reasonable precautions" were themselves without risks, or that, if employed, they would have necessarily prevented Melanie's paraplegia.

[111] Based on all of the evidence, it is clear that the decisions made in Melanie's case involved the assessment and weighing of a multitude of complex factors, both prior to the surgery and intra-operatively. Dr. Ashmore brought to that unenviable task enormous skill and experience. In hindsight, he was tragically mistaken in his choice of approach. Dr. Ashmore's surgical plan did not take into account a rare and exceptional occurrence - the tear in the aorta at the time of cross clamping. Notwithstanding the application of diligence, care, knowledge, skill and caution, Melanie has suffered the tragic results of Dr. Ashmore's inability to foresee what occurred. But the law does not impose a standard of perfection upon doctors. They cannot be expected to be the predictors of the rare and exceptional occurrence. This, of course, provides no comfort or solace to Melanie who must live with the consequences of the strictures of an imperfect standard. It is an exceedingly fine line which must necessarily be

drawn. However, after long and anxious consideration, I conclude that Dr. Ashmore's conduct fell within the acceptable standard of an ordinary cardiac surgeon acting with prudence and diligence.

(my emphasis)

[45] I have added emphasis to the last two sentences in which Madam Justice Kirkpatrick expresses her conclusion. I think it is fair to say that the words "an exceedingly fine line" and the words "after long and anxious consideration" must be taken to incorporate into Madam Justice Kirkpatrick's reasons an indication that the plaintiff must have come very close to establishing her case on a balance of probabilities, as she is required to do, but to have fallen just short in Madam Justice Kirkpatrick's opinion.

X

THE CONDUCT OF THE OPERATION: THE APPELLANT'S ARGUMENT

[46] The appellant's argument in relation to the first ground was made under three headings, each described, in accordance with the Court's Rules, as an error in the trial judgment:

I. The Learned Trial Judge erred in finding that Dr. Ashmore was not required to foresee, and plan for, a tear in the aorta at the time of cross-clamping.
II. The Learned Trial Judge erred in finding that Dr. Ashmore's operative approach conformed to an accepted standard medical practice.
III. In the alternative, the Trial Judge erred in failing to find that the standard medical practice to which Dr. Ashmore conformed was itself negligent.

Alleged Error No. I

[47] This alleged error lies in para.111 of the trial judge's reasons. I will repeat a part of that paragraph:

In hindsight, [Dr. Ashmore] was tragically mistaken in his choice of approach. Dr. Ashmore's surgical plan did not take into account a rare and exceptional occurrence - the tear in the aorta at the time of cross clamping. Notwithstanding the application of diligence, care, knowledge, skill and caution, Melanie has suffered the tragic results of Dr. Ashmore's inability to foresee what occurred. But the law does not impose a standard of perfection upon doctors. They cannot be expected to be the predictors of the rare and exceptional occurrence.

[48] The appellant referred in her factum to the evidence of Dr. Trusler, the witness for the defendant who seems to have been most heavily relied on by the trial judge, and whose report is extensively quoted by the trial judge. In particular, the appellant referred to this passage from Dr.

Trusler's report, quoted by the trial judge in her reasons:

> It is often most dangerous on the back wall where it may be adherent to the tissue anterior to the spine and where visibility is limited because the dissection passes behind the aorta. There is a constant and substantial risk of tearing the aorta with subsequent bleeding and hypotension during such dissection...
>
> (emphasis added by appellant)

[49] The appellant said that the general risk of uncontrolled haemorrhaging was generally foreseeable and the specific risk of haemorrhaging through a torn aorta was specifically foreseeable; that having regard to that foreseeability either a Gott Shunt or a bypass machine should have been used prophylactically; and that the failure to do so constituted negligence.

Alleged Error No. II

[50] In relation to this alleged error on the part of the trial judge the appellant referred to a number of separate instances of error.

[51] It was said that the trial judge erred in her finding that the recoarctation site posed "no special circumstances". It was pointed out that the evidence of Dr. LeBlanc, Dr. Sett and Dr. Ashmore, the doctors who were present, was that the site presented very dense adhesions encasing the aorta and that the aorta was thin and friable. It was said that any conclusion that those conditions could not have been anticipated and could not have been known until the operation was underway represented a misunderstanding of the medical evidence. For a sixteen-year old girl who had had two previous coarctation repair operations, an angioplasty, and a history of blood pressure problems it was said that this operation presented special difficulties which required that prophylactic measures be put in place before reaching the dangers presented by those difficulties.

[52] It was said also that the trial judge erred in her assessment of the medical literature which, it was said, did not support a decision not to use prophylactic protection in a third coarctation repair at all, and particularly not where the cross-clamping was anticipated to exceed thirty minutes even if all went well.

[53] It was said that the trial judge erred in her assessment of the expert evidence. The expert witnesses of the defendant, Dr. Trusler and Dr. Penkoske, it was said, misunderstood Dr. Ashmore's plan. They based their views on the fact that there was no basis for believing that Melanie's adhesions would be different than adhesions to be expected in any other recoarctation repair. Dr. Trusler, it was said, did not know that the cross-clamp time estimated by Dr. Ashmore might be as long as sixty minutes, even if all went well.

[54] It was pointed out that the evidence that there was no "guarantee" that paraplegia would be avoided if prophylactic protection had been used, misconceived the plaintiff's position and this misconception constituted an error on the part of the trial judge. A guarantee was not expected. What was expected was that the operation would be conducted under a procedure that significantly reduced the risk of paraplegia by the use of prophylactic protection.

[55] It was said that the trial judge erred in failing to mention in her reasons Dr. LeBlanc's practice of putting his patients on a bypass machine in advance of fine dissection "to ensure safety for dissection", and his practice of prophylactically placing the bypass tubes of the bypass machine so that "when I am in the chest if I encounter any difficulty I can go on the heart/lung machine right away".

[56] It was a part of the appellant's argument that the trial judge erred in accepting Dr. Ashmore's "concerns" about using a bypass as justification for proceeding without any protection in place at all. It was said that Dr. Ashmore's "concerns" were inconsistent with, first, the safe and routine use of the bypass machine "every day" as a "main tool" of cardiac surgery; second, the use of the bypass machine on literally thousands of occasions by all the cardiac surgeons who testified; third, the evidence of his colleagues who described the risk associated with the use of the bypass machine as "very very minimal", "extremely minimal" or "pretty rare"; fourth, Dr. LeBlanc's assessment, following the rounds on Melanie's case, that in view of the anticipated difficulties of dissection either a Gott Shunt, or a bypass machine, should be used prophylactically; and fifth, the use of a bypass machine to provide "extra safety" in cases where the surgeon anticipates that there might be difficulty as in the case of dense adhesions.

[57] Reference was also made to para.93 of the trial judgement which is in these terms:

> Notwithstanding the unpredictability of the extent and density of scar tissue and adhesions, and the sufficiency of Melanie's collateral circulation, as well as the possible friability of the aorta, it is plain from Dr. Ashmore's evidence that those risk factors were not ignored. Indeed, they were planned for, as evidenced by his intention to use a Gott shunt if the collateral circulation proved to be inadequate.

It was said that the trial judge misinterpreted Dr. Ashmore's evidence in her conclusion that the unpredictability of the extent and density of scar tissue and adhesions and the possible friability of the aorta were planned for and not ignored. Only the possible insufficiency of Melanie's collateral circulation was planned for and only it was to be remedied by the use of the Gott Shunt.

[58] It was pointed out by way of overview in relation to the discussion by the appellant's counsel of the trial judge's reasons that the error said to have been made by the trial judge must be assessed on the basis that she, herself, said that an "exceedingly fine line" must necessarily be drawn and the assessment of this first ground required "long and anxious consideration". It was argued that if the trial judge had not made the particular specified errors in relation to the evidence, then she may well have reached a conclusion on the other side of the "exceedingly fine line".

[59] So it was argued that the errors altered the result. Accordingly it was said that some evidence was ignored, some evidence was misconstrued, and that some incorrect conclusions were drawn from the evidence with the result that the trial judgment was both clearly wrong and manifestly wrong as a result of palpable errors inducing an incorrect conclusion.

Alleged Error No. III

[60] In making the argument in relation to this alleged error, counsel for the appellant relied on this timeless passage from Anderson v. Chasney, [1949] 4 D.L.R. 71 (Man.C.A.), per Mr. Justice Coyne at pp.86-87:

> Ordinary common sense dictates that when simple methods to avoid danger have been devised, are known and are available, non-user, with fatal result, cannot be justified by saying that others also have been following the same old, less careful practice.

[61] It was argued that the surgical technique adopted for this operation by Dr. Ashmore, and supported in his evidence by Dr. Trusler, was a technique used and kept in use only by older surgeons. (Dr. Ashmore and Dr. Trusler were both in their mid-sixties in 1990.) But Dr. LeBlanc and surgeons of his generation had been trained to use a bypass machine for surgery like the operation on Melanie so that, in Dr. Trusler's words, "they have that extra safety".

[62] This argument was advanced to support the allegation that the trial judge erred in failing to find that the medical technique for this operation to which Dr. Ashmore conformed was itself negligent.

XI

THE CONDUCT OF THE OPERATION: SUMMARY, OBSERVATIONS AND CONCLUSIONS

[63] Having regard to the view that I take of the issue of liability on the second ground of claim, namely that as a matter of law Dr. Ashmore is liable to Melanie for a failure to observe the requirements with respect to informed consent, it is unnecessary for me to reach any conclusion with respect to

the first ground of claim and I do not propose to do so.

[64] But before turning to the second ground of claim I propose to make four observations. In doing so I wish to say that I do not regard myself as substituting my view of the evidence for any finding made by the trial judge or as otherwise infringing on the function of the trial judge under the principles set out in Toneguzzo-Norvell v. Burnaby Hospital and discussed in Part IV of these reasons.

[65] My first observation is that while there is support in the evidence for the view that Dr. Ashmore's surgical plan was not contrary to all qualified medical opinion in 1990, (though it was argued that Dr. Trusler did not know that Dr. Ashmore intended to cross-clamp without prophylactic support for as long as sixty minutes even if all went well, and that Dr. Penkoske was not as reliable as the plaintiff's experts), nonetheless there is a very extensive body of evidence that, with Melanie's history, this operation should have been conducted with prophylactic protection and support in place or immediately available, either in the form of a bypass machine or a Gott Shunt.

[66] My second observation is that the trial judge correctly recorded the evidence when she said (at para.121) that the risk of paraplegia in coarctation repair surgery, in general, is .41%; but the trial judge seems to have misapplied that evidence and drawn an incorrect conclusion from it when she considered (in para.131) that in relation to Melanie the risk of paraplegia in this third coarctation repair operation, with her medical history, was .41% (given to two decimal places). The risk of paraplegia in a third coarctation repair operation does not seem to have been the subject of any specific study revealed in the medical literature. But the medical evidence in this case is to the effect that the risk of paraplegia in a third coarctation repair operation is significantly greater than in a first coarctation repair operation. Dr. LeBlanc said that the risk grows to 3% or 4%. In Melanie's case, anticipating dense adhesions from the previous surgeries and a friable aorta, I think that the evidence as a whole suggests that the risk of paraplegia should be taken to have been somewhere between 1% and 4%.

[67] My third observation is that even though there are some identifiable risks associated with both the Gott Shunt and the bypass machine, nonetheless the risk of paraplegia, the risk of death, and the other overall risks are significantly reduced if prophylactic protection in the form of a bypass machine or a Gott Shunt is employed in a third coarctation repair where dense adhesions and a friable aorta ought to be anticipated. The three expert witnesses called by the plaintiff, namely Dr. Gillis, Dr. Cornel, and Dr. Miyagishima all considered that the bypass machine should have been used prophylactically, that is, for safety protection. Dr. LeBlanc, who attended the "rounds" surgical conference in March 1989 said then that prophylactic protection "should" be used for safety, and he said in his evidence that he would have used a cardiopulmonary bypass as a

safety measure. But, most noteworthy of all, on re-examination by counsel for Dr. Ashmore, Dr. Trusler, a witness called by the defendant, summed up his evidence in these words:

> And the young surgeons coming out now, and for the last 20 years, they're mostly trained in adult surgery and then after all their training in adult surgery they come to the pediatric side for one year. Now, they will -- they will have done -- the adults do everything on bypass. They do all their aorta coronary bypasses are done on the pump, all their valve surgery is done on the pump, and that's most of adult cardiac surgery. So if they're going to do anything around the heart it's done on the pump. And they come to us and they may see two recurrent coarctations in a year that are done without the pump, so they go back home and they -- they have done everything on the pump and they really don't feel comfortable if they're not on the pump and they have that extra safety. So that maybe in the long term that's the way to go, but it has -- over the last 20, 30 years doing it the way we've done it has produced very satisfactory results. It's just interesting that -- to see how it's all worked out historically.
>
> (my emphasis)

So Dr. Trusler explicitly recognized that the use of a cardiopulmonary bypass provides extra safety and that, for that reason, "maybe in the long term that is the way to go".

[68] My fourth observation is that the trial judge, twice in her reasons (at paras.96 and 110), noted the evidence that there was no guarantee that the use of prophylactic protection would have avoided the paraplegia. But we are considering a question about a reduction of risks, not about guarantees. It seems to me that dwelling on the absence of a guarantee through use of a bypass may indicate a misconception on the part of the trial judge of the risk assessment process in relation to the use of the bypass as a safety measure.

[69] However, in addition to those four observations there is one conclusion that I propose to draw from the evidence in relation to the first ground of claim because it is necessary to my process of reasoning on the second ground of claim. That conclusion is that all of the medical evidence is to the effect that there are at least three principal alternative methods of carrying out this third coarctation repair operation. The first is the method adopted by Dr. Ashmore, which does not use any prophylactic protection but which has a Gott Shunt available for use if the collateral blood flow is insufficient to maintain circulation to the spine and lower limbs throughout the operative procedure. The second is to use the Gott Shunt prophylactically by installing it before cross-clamping the aorta. The third is to have a cardiopulmonary by-pass pump available, and to either hook it up or have everything ready to hook it up so that it may be immediately available, or may be

called upon speedily if it is required. Each of those alternative methods has its own risks. In each case those risks are describable and, in some respects, assessable. There is no reason why they could not be described, assessed, and discussed with the patient who has consenting capacity. Decisions taken after that would be based on the patient's own assessment of the risks and his or her expressed preferences. There is nothing in that conclusion that is contrary, either expressly or implicitly, to the findings or conclusions of the trial judge. She reached no finding or conclusion on that question. Any such finding or conclusion was not necessary to her train of reasoning or to her ultimate conclusion on the first ground of claim that failure to use a cardiopulmonary by-pass or a Gott Shunt used prophylactically did not constitute negligence.

[70] There is one further conclusion which I consider that it is proper to draw from the evidence in relation to the first ground of claim and which may be regarded as supporting my reasons on the second ground of claim, though I do not regard this second conclusion as essential to my reasons on the second ground of claim but only as an aid to those reasons. That second conclusion arises from my third observation, namely, that the expert evidence, including that of Dr. Gillis, Dr. Cornel, and Dr. Miyagishima, called by the plaintiff, and Dr. Trusler, called by the defendant, is to the effect that having prophylactic protection in the form of a cardiopulmonary bypass pump, or a Gott Shunt used prophylactically, provides "extra safety" in a coarctation repair of this kind. Again there is nothing in that conclusion that is contrary, either expressly or implicitly, to the findings or conclusions of the trial judge. She reached no finding or conclusion on that question. Any such finding or conclusion was not necessary to her train of reasoning or to her ultimate conclusion on the first ground of claim that failure to use a cardiopulmonary bypass or a Gott Shunt used prophylactically did not constitute negligence.

XII

INFORMED CONSENT: THE SECOND GROUND OF CLAIM

[71] The question of informed consent was the second ground of claim at the trial and the second principal argument on the appeal.

[72] In the course of oral argument we asked for additional written submissions with respect to informed consent in relation to a person of Melanie's age at the time of this operation, namely sixteen years and three months. The questions we asked were these:

1. As a matter of law was the informed consent of Melanie required in this case? If so did the Reibl standard apply or did an Infants Act standard apply or did both standards apply or did some other standard apply?

2. As a matter of law was the informed consent of Mr. and Mrs. Van Mol required in this case? If so did the Reibl standard apply or did some other standard apply or did both apply?

We received supplementary written submissions from counsel on those two questions, though both questions had been addressed in the factums and the oral submissions.

[73] I propose to discuss, first, in Part XIII, the capacity of a sixteen- year old patient in British Columbia in 1990 with respect to informed consent, and the position of the parents of the sixteen-year old patient. Then I propose to consider, in Part XIV, the applicable standard of care for a doctor in relation to the informed consent of a patient of full capacity where there are surgical alternatives carrying different risks. After that, in Part XV, I will turn to this particular operation, a third coarctation repair to be conducted on this particular patient, Melanie, and consider the applicable standard of care in relation to informed consent. In Part XVI I will consider the evidence in relation to the question of whether informed consent was given in this case and, in particular, whether the trial judge erred, as submitted by the appellant, when she concluded that Dr. Ashmore was not in breach of his duty with respect to obtaining consent to his surgical plan. I will then, in Part XVII, state my summary and conclusions on the second ground of claim, relating to informed consent.

XIII

INFORMED CONSENT: A SIXTEEN-YEAR OLD PATIENT

[74] In this Part XIII, I will consider the law on the capacity of a sixteen-year old patient in British Columbia in 1990 with respect to giving informed consent to medical treatment, and I will consider also the position of the parents of the sixteen-year old patient with respect to giving informed consent to the medical treatment of a sixteen-year old.

[75] At common law, without any reference to statute law, a young person, still a minor, may give, on his or her own behalf, a fully informed consent to medical treatment if he or she has sufficient maturity, intelligence and capability of understanding what is involved in making informed choices about the proposed medical treatment. If a young person does not have that degree of maturity, intelligence, and capability of understanding, then that young person cannot give informed consent to proposed medical treatment, and the consent must be given by a parent or guardian. But once the required capacity

to consent has been achieved by the young person reaching sufficient maturity, intelligence and capability of understanding, the discussions about the nature of the treatment, its gravity, the material risks and any special or unusual risks, and the decisions about undergoing treatment, and about the form of the treatment, must all take place with and be made by the young person whose bodily integrity is to be invaded and whose life and health will be affected by the outcome. At that stage, the parent or guardian will no longer have any overriding right to give or withhold consent. All rights in relation to giving or withholding consent will then be held entirely by the child. The role of the parent or guardian is as advisor and friend. There is no room for conflicting decisions between a young person who has achieved consenting capacity, on the one hand, and a parent or guardian, on the other.

[76] The propositions of law in the previous paragraph are of long-standing duration. The discretion of a child to make his or her own decisions before achieving the age of majority in relation to important life events is discussed in Blackstone's Commentaries, 17th ed. (1830) vol. 1 c.16 and 17, at p.463, as mentioned in the leading English authority of Gillick v. West Norfolk, [1986] 1 A.C. 112, particularly by Lord Fraser of Tullybelton and Lord Scarman, which reaffirms the common law position as I have described it in the previous paragraph.

[77] In Ney v. Canada (Attorney General) (1993), 102 D.L.R. (4th) 135 (B.C.S.C.), Madam Justice Huddart, in a fully researched set of reasons, summarized the common law position in British Columbia in this way, at p.142:

> In sum, where a child has sufficient intelligence and understanding of the nature of proposed health care, he or she is capable at common law of consenting to such treatment. If a child does not meet this test, and as a result is incapable of consenting, the consent of the parents of that child will be required.

That passage was cited with approval and agreed with by Chief Justice McEachern in a judgment for a majority in this Court in Regina v. W.(D.D.) (1997), 114 C.C.C. (3d) 506 at 518. Chief Justice McEachern added this observation:

> It goes without saying, of course, that any consent, to be valid, must be a fully informed consent: Reibl v. Hughes, [1980] 2 S.C.R. 880.

[78] Madam Justice Huddart referred to Lord Nathan's work: Medical Negligence (1957) and to an article by Professor Skagg: Consent to Medical Procedures on Minors (1973), 36 M.L.R. 370, at 372-3. Madam Justice Huddart also referred to this passage from the majority reasons of Lord Scarman in the Gillick case, at p.188:

> The modern law governing parental right and a child's

capacity to make his own decisions was considered in Reg. v. D., [1984] A.C. 778. The House must, in my view, be understood as having in that case accepted that, save where statute otherwise provides, a minor's capacity to make his or her decision depends upon the minor having sufficient understanding and intelligence to make the decision and is not to be determined by reference to any judicially fixed age limit.

At pp. 188-9, Lord Scarman continued:

In light of the foregoing I would hold that as a matter of law the parental right to determine whether or not their minor child below the age of 16 will have medical treatment terminates if and when the child achieves a sufficient understanding and intelligence to enable him or her to understand fully what is proposed. It will be a question of fact whether a child seeking advice has sufficient understanding of what is involved to give a consent which is valid in law. Until the child achieves the capacity to consent, the parental right to make the decision continues save only in exceptional circumstances.

[79] The articulation of the common law position by the New Brunswick Court of Appeal in Walker v. Region 2 Hospital Corp. (1994), 116 D.L.R. (4th) 477 is no different than the common law of England and of British Columbia as I have set it out. At p.487, Chief Justice Hoyt put the common law position in this way:

> In Canada, the common law recognizes the doctrine of a mature minor, namely, one who is capable of understanding the nature and consequences of the proposed treatment. Accordingly, a minor, if mature, does have the legal capacity to consent to his or her own medical treatment. See Rozovsky and Rozovsky, The Canadian Law of Consent to Treatment (Toronto and Vancouver: Butterworths, 1990), at pp. 53-5 and to the cases referred to therein. At common law, when a minor is mature, no parental consent is required.

[80] I propose to move on now to the relevance, if any, of the statute law in effect in 1990.

[81] A new section of the Infants Act with respect to medical treatment was enacted in 1973 and was in effect in 1990. It was subsequently modified in 1992. In 1990, the relevant time for this case, it read:

Consent of infant to medical treatment

> 16. (1) Subject to subsection (4), the consent of an infant who has attained 16 years of age to

surgical, medical, mental or dental treatment which, in the absence of consent, would constitute a trespass to his person, shall be as effective as it would be if he were of full age.

(2) Where an infant has, by virtue of this section, given his consent to any treatment it is not necessary to obtain a consent from his parent or guardian.

(3) In this section "surgical, medical or mental treatment" means any procedure undertaken by a medical practitioner, ...

(4) Nothing in this section makes a consent effective unless

(a) a reasonable effort has first been made by the medical practitioner or the dentist to obtain the consent of the parent or guardian of the infant; or

(b) a written opinion from one other medical practitioner or dentist is obtained confirming that the surgical, medical, mental or dental treatment and the procedure to be undertaken is in the best interest of the continued health and well being of the infant.

(5) This section does not make ineffective a consent which would have been effective if the section had not been enacted.

(6) A medical practitioner or dentist who treats an infant under subsections (1) and (2) without consent from his parent or guardian may provide the parent or guardian of the infant with the information the person treating the infant considers advisable.

[82] This section 16 precisely tracks the wording of s.8 of the English Family Law Reform Act, 1969 though s-s.(4) has been added to s.16 of the Infants Act and did not appear in the English legislation.

[83] The 1973 addition to the Infants Act was subjected to well argued criticism by Professor Richard Gosse in an article: Consent to Medical Treatment: A Minor Digression (1974), 9 U.B.C. Law Review 56. Many of Professor Gosse's criticisms were met in the substantial amendment to the legislation in 1993.

[84] Let us suppose, for the purposes of this Part of these reasons, that Melanie, at age 16 years and 3 months in February, 1990, through her maturity, intelligence and capability of understanding what was involved in the treatment, had the capacity at common law to give an informed consent to

this third coarctation repair procedure. There is nothing in s.16 which would invalidate any fully informed consent that she had given at that time. The same is true of any informed consent given by Melanie at age 15, when she was first admitted to B.C. Children's Hospital in 1989, for the purposes of undertaking this procedure, again assuming that she had the capacity to consent at common law at that time. By s-s.(5) it is provided that s.16 does not make ineffective a consent which would have been effective if s.16 had not been enacted. The precise effect of that very subsection (5) was considered by Lord Fraser of Tullybelton and by Lord Scarman in the Gillick decision. They decided that s-s.16(5) is to be taken as confirming the common law, without stating what the common law is, in relation to minors under the age of 16. And it cannot be supposed that a 15 year old with capacity to consent to a particular procedure would lose that capacity on turning 16.

[85] It must also be particularly noted that there is nothing in s.16 which would substitute the consent of a parent or guardian for the consent of a young person who has achieved capacity to give fully informed consent through maturity, intelligence and capability of understanding the procedure to be undertaken.

[86] At a minimum, what s.16 does is give protection to doctors who might otherwise be at risk in relation to the commission of an act of battery or other trespass to the person, because they are uncertain of a particular young person's capacity to give consent. The protection arises from allowing the doctor to rely on knowledge that the young person is 16 years old and has given apparent consent to the medical treatment.

[87] A strong argument can be made that s.16 goes even further and that it makes a 16 year old person the only person who can give informed consent to that person's own medical treatment, though it also obliges the doctor to endeavour to obtain either the consent of the parent or guardian, or a written opinion from another medical practitioner that the treatment is in the best interests of the young person. The only difficulty in the way of that argument is that after the predecessor of s.16 was enacted in England, and after s.16 was enacted in Canada, the Supreme Court of Canada decided Reibl v. Hughes which changed the law in relation to the nature of the tort committed through a failure to obtain informed consent, so that failure to obtain apparent consent at all constituted a trespass to the person, but obtaining apparent consent by doing so without a proper risk discussion ceased to be the tort of trespass to the person and was confirmed to be the tort of negligence. As I have said, a strong argument can be made, as a matter of statutory interpretation, that the legislature, when it enacted s.16, was intending to deal with what would otherwise be both the tort of proceeding without apparent consent and also the tort of proceeding without a fully informed consent. But on the view I take of this case, it is unnecessary to decide that question.

[88] I do not think that it is necessary for me to discuss the question of the capacity of a sixteen-year old any further,

since neither party to this appeal disagreed with the essence of the law as summarized by Madam Justice Huddart in Ney.

[89] The position of the parents at common law is straightforward. If the child does not have sufficient intelligence and understanding to have the capacity to consent, then only the parents can consent and their consent will be sufficient. But once the child has sufficient intelligence and understanding to have the capacity to consent, then only the consent of the child will do. The capacity of the parents to consent on behalf of the child does not coexist with the child's own capacity to consent or to refuse consent. It could not be otherwise. But that is not to say that the parents need not be involved in the process of explanation, instruction and advice leading to the obtaining of the informed consent of the child. They should be involved as part of that process wherever possible.

XIV

INFORMED CONSENT: SURGICAL ALTERNATIVES

[90] In this Part I propose to consider whether Dr. Ashmore was required by law to discuss the surgical alternatives for this operation with the person capable of giving informed consent to the operation.

[91] What has become the classic statement of the doctrine of informed consent in Canada is this passage from the reasons of Chief Justice Laskin, for the Supreme Court of Canada, in Hopp v. Lepp, [1980] 2 S.C.R. 192 at p.210:

> In summary, the decided cases appear to indicate that, in obtaining the consent of a patient for the performance upon him of a surgical operation, a surgeon, generally, should answer any specific questions posed by the patient as to the risks involved and should, without being questioned, disclose to him the nature of the proposed operation, its gravity, and any material risks and any special or unusual risks attendant upon the performance of the operation. However, having said that, it should be added that the scope of the duty of disclosure and whether or not it has been breached are matters which must be decided in relation to the circumstances of each particular case.
>
> (my emphasis)

[92] That passage was affirmed by the Supreme Court of Canada in Reibl v. Hughes, [1980] 2 S.C.R. 880, a case dealing with causation if negligence is first established, and setting out the modified objective test for causation, recently reaffirmed by the Supreme Court of Canada in Arndt v. Smith, [1997] 2 S.C.R. 539. The passage has been applied many times and is thoroughly embedded in the law.

[93] The question that I am addressing in this Part relates to the substance of the risk discussion that would have had to take place between a doctor in Dr. Ashmore's position and a patient of full age and capacity undergoing the third coarctation repair procedure that Melanie was about to undergo, in order to fulfil the requirements of the law in relation to informed consent.

[94] The evidence has shown that a third coarctation repair operation was the correct medical treatment for Melanie. That is not disputed. But the principles established by Reibl v. Hughes do not merely require that simple consent to the operation be obtained. Such a simple consent does not meet the qualification that the consent must be "informed". In order to meet the qualification carried by the word "informed" more must occur than just a discussion of the medical purpose of the operation and what is proposed to be done to carry out the medical purpose. The Reibl standard explicitly requires that in addition to describing the nature of the operation, including its gravity, there must be a discussion of "any material risks and any special or unusual risks attendant upon the performance of the operation". So the precise question on the nature of the discussion which should have taken place between a doctor proposing to carry out a third coarctation repair on a person of full age and capacity in a position like Melanie's is whether the three surgical alternatives should have been put to such a person, with an assessment of the risks of each.

[95] It would also follow from my second conclusion in Part XI that any risk discussion of the three alternatives should have included: first, a statement that "extra safety" was given by the use of prophylactic protection in the form of a cardiopulmonary bypass, hooked up or ready to be hooked up, or a Gott Shunt used prophylactically; second, a statement that it was not Dr. Ashmore's intention to use prophylactic protection; third, a statement of why Dr. Ashmore did not intend to use prophylactic protection; and fourth, a statement that a second opinion could be obtained or a statement that either Dr. Ashmore would adopt the surgical technique chosen as a preferable option by the patient in Melanie's position or would obtain for Melanie another competent surgeon to do the operation who would adopt the option preferred by the patient in Melanie's position. But the essential question is whether the three principal surgical alternatives should have been discussed with the person capable of giving informed consent.

[96] The question of whether a risk discussion should include a discussion of the available surgical alternatives has been addressed in a number of cases.

[97] In Dow Corning Corporation v. Hollis, [1995] 4 S.C.R. 634, Mr. Justice La Forest, for the majority in the Supreme Court of Canada, at p.656, approved this passage from Canterbury v. Spence, 464 F.2d 772 (D.C. Cir., 1972) at p.780:

True consent to what happens to one's self is the informed exercise of a choice, and that entails an opportunity to evaluate knowledgeably the options available and the risks attendant upon each. The average patient has little or no understanding of the medical arts, and ordinarily has only his physician to whom he can look for enlightenment with which to reach an intelligent decision.

(my emphasis)

[98] The issue was discussed in Malette v. Shulman (1990), 67 D.L.R. (4th) 321 (Ont.C.A.). That case involved the giving of a blood transfusion to someone who carried a card saying that she did not wish a blood transfusion even in an emergency. Mr. Justice Robins, for the Ontario Court of Appeal, said this, at pp.327-8:

The doctrine of informed consent has developed in the law as the primary means of protecting a patient's right to control his or her medical treatment. Under the doctrine, no medical procedure may be undertaken without the patient's consent, obtained after the patient has been provided with sufficient information to evaluate the risks and benefits of the proposed treatment and other available options. The doctrine presupposes the patient's capacity to make a subjective treatment decision, based on her understanding of the necessary medical facts provided by the doctor and on her assessment of her own personal circumstances.

. . .

The right of self-determination, which underlies the doctrine of informed consent, also obviously encompasses the right to refuse medical treatment. A competent adult is generally entitled to reject a specific treatment or all treatment, or to select an alternative form of treatment, even if the decision may entail risks as serious as death and may appear mistaken in the eyes of the medical profession or of the community.

. . .

The doctrine of informed consent is plainly intended to ensure the freedom of individuals to make choices concerning their medical care. For this freedom to be meaningful, people must have the right to make choices that accord with their own values, regardless of how unwise or foolish those choices may appear to others.

(my emphasis)

[99] In Haughian v. Paine (1987), 37 D.L.R. (4th) 624; 40 C.C.L.T. 13 (Sask.C.A.) Mr. Justice Sherstobitoff for the Court, said, at D.L.R. p.644:

One cannot make an informed decision to undertake a

risk without knowing the alternatives to undergoing the risk.

(my emphasis)

[100] To the same effect, Mr. Justice Hollinrake, for this Court, said in Johnston v. Boyd (1996), 82 B.C.A.C. 113, at paras.18-22, that an explanation of surgical options, including but not limited to the option of doing nothing, is required for informed consent.

[101] This issue was also addressed in Seney v. Crooks, [1996] 9 W.W.R. 423, 30 C.C.L.T. (2d) 66 (Alta.Q.B.), a decision of Mr. Justice McIntyre. At paras. 60-62, this was said:

> The doctor-patient relationship is a joint venture. Doctors must discuss the risks, advise patients of possible adverse results, and give the patient an opportunity of understanding and participating in the healing process. In my view, Dr. Crooks failed to meet either the medical standard of developing a doctor-patient relationship or the legal standard of disclosure of risk and discussion of options.
>
> Dr. Crooks did not establish a relationship of trust. There was little communication with the patient. He did not describe to her in any detail her medical condition - he said it was a typical wrist break. He did not disclose to her the clear risk of the wrist shortening, the risk of deformity, or the risk of loss of function. Most importantly, he did not discuss with her other options. External fixation was an option then utilized in Calgary by orthopaedic surgeons of ordinary ability. As I said, I am persuaded that external fixation would have avoided the bad result. Dr. Crooks should have discussed this option with her and made a recommendation. Mrs. Seney did not have the chance to assess this option.
>
> I find a breach of Dr. Crook's standard of care in respect of communication, disclosure and discussing options with his patient.
>
> (my emphasis)

[102] In my opinion, a person of full age and capacity, but otherwise in the position that Melanie was in just before this surgery, would have been entitled to know about the three alternative methods of carrying out this third coarctation repair operation and about the risks and advantages of each.

[103] In relation to my second conclusion in Part XI I consider also that such a person would have been entitled to know: first, that the risk of paraplegia, the risk of death,

and the other overall risks of this operation would be reduced, and "extra safety" achieved, if prophylactic protection in the form of a bypass machine or a Gott Shunt used prophylactically were to be employed in this third coarctation repair, where dense adhesions and a friable aorta should have been anticipated; second, that Dr. Ashmore did not propose to use prophylactic protection; and, third, that such a person of full age and capacity could obtain a second opinion, and if such a person decided to have the operation with prophylactic protection then Dr. Ashmore would either have used that technique, or, alternatively, arranged for a skilled surgeon who would have used a prophylactic technique.

XV

INFORMED CONSENT: THE STANDARD OF CARE FOR MELANIE

[104] In this Part I propose to discuss the precise evidence in relation to Melanie and to reach a conclusion about whether she was the person capable of giving informed consent to this surgical procedure.

[105] By the time the trial took place in 1996 Melanie was 22 years old. She was in the final term of her program of studies leading to a Bachelor of Arts degree at the University of Victoria. Her major field of study was Psychology. We can infer that Melanie, at age 16 years and 3 months when the operation took place, was an intelligent young woman.

[106] Melanie was selected in 1989 by Nurse Cook, a cardiac care nurse involved with Melanie's care both before and after the operation, to be the subject of a video being prepared by the B.C. Children's Hospital. The video was designed to allay the fears and apprehensions of youngsters about to undergo serious surgery at the hospital, particularly cardiac surgery. Nurse Cook described Melanie in this way, in examination in chief:

Q Now, I just want to come generally to your dealing with Melanie. Can you describe for Her Ladyship the assessment you made of Melanie's intelligence and maturity?

A Melanie, when I met her, was a bright articulate, adolescent girl.

Q And was she communicative?

A Yes, she was.

Q And did that have a bearing on your selection of her to be in the video?

A Yes, we needed someone in the video that was able to articulate their feelings clearly for other teenagers and also to be able to engage in a conversation with other teenagers.

[107] After Mr. and Mrs. Van Mol received Dr. Patterson's letter of March 1989 recommending a third coarctation repair operation they discussed the proposed surgery with Melanie and arranged for Melanie to discuss it with Dr. Sheila Burnside, the family's doctor in Kamloops where they lived. On 11 April, 1989 Melanie saw Dr. Burnside for prolonged counselling about the operation. On 19 April Melanie saw Dr. Burnside again. Dr. Burnside recorded that Melanie was "Still weeping when talking on the surgery, but less so." Dr. Burnside also noted that "Melanie was crying because she was worried about the operation." After the meeting Dr. Burnside decided that Melanie should see Dr. Patterson "... to have a full description of forthcoming surgery explained." On 20 April 1989, Dr. Burnside wrote to Dr. Patterson in these terms:

> I have had a couple of chats with Melanie, and she is quite anxious to talk to either yourself or Dr. Ashmore ahead of time about exactly what will happen at the surgery.
>
> (my emphasis)

[108] Dr. Ashmore, like the other defendant doctors, admitted the following facts by a formal written admission:

> It was Dr. Burnside's expectation that Melanie and her parents would be provided, by Dr. Ashmore or Dr. Patterson, with a description of the forthcoming surgery including:
>
> (a) a review of the surgical procedure including a technical review setting out in layman's terms whether something was going to be "stitched" or "cut out";
>
> (b) the reasons why this surgery was necessary;
>
> (c) the results that the surgeons hoped to obtain;
>
> (d) the risks the surgeons hoped to avoid in the course of the operation.
>
> Dr. Burnside understood it was Melanie's desire to receive information about what she was to expect with respect to the surgery, what her options were and what the risks were.
>
> Dr. Burnside's own understanding was that because Melanie was more full grown there was a better chance that the same operative technique would be successful the third time around and that the third operation was technically easier and she advised Melanie of this.
>
> Dr. Burnside was not informed by either Dr. Patterson or Dr. Ashmore, prior to February 26, 1990, that the operation was as or more risky than the prior two

operations.

On or about April 20, 1989, Dr. Burnside spoke with Dr. Patterson to convey to him, inter alia, Melanie's concerns about the upcoming surgery. After talking to Dr. Paterson, Dr. Burnside was more comfortable about the operation proceeding and accepted his recommendation for proceeding with the proposed surgery.

Dr. Burnside never had a discussion with Melanie or her parents about the risk of paraplegia arising rom the operation.

At no time prior to the operation of February 26, 1990, was Dr. Burnside aware of, or informed by either Dr. Patterson or Dr. Ashmore, as to any specific risks associated with the operation including the risk of paraplegia.

Melanie never indicated to Dr. Burnside as to whether or not she had been advised of any specific risks associated with the operation, and in particular, Melanie never mentioned whether or not she had been informed by either Dr. Patterson or Dr. Ashmore of the risks of paraplegia. It was Dr. Burnside's understanding that after Melanie had met with Dr. Patterson to discuss the operation that Melanie's questions had been answered and she was much more comfortable about going ahead with the surgery and that her anxiety had been reduced.

Dr. Burnside had not expected, and was not prepared for the outcome of the surgery on February 26, 1990, leaving Melanie a paraplegic.

(my emphasis)

[109] Based on that evidence, there could be no doubt, in my opinion, that Dr. Burnside regarded Melanie as having the intelligence and understanding to give a full informed consent; to have all her questions answered; to be informed of the material risks, and the unusual or special risks, including the risks the surgeon hoped to avoid in the course of the operation; and to have all the relevant options explained to her so that she could make an informed decision.

[110] Counsel for Dr. Ashmore referred to this passage from Reibl v. Hughes at p.895:

Again, it may be the case that a particular patient may, because of emotional factors, be unable to cope with facts relevant to recommended surgery or treatment and the doctor may, in such a case, be justified in withholding or generalizing information as to which he would otherwise be required to be more specific.

Counsel submitted that Dr. Ashmore decided to generalize to some extent the information he gave to Melanie because of his assessment of Melanie's emotional condition. She was said to be apprehensive and to have had irrational fears about being murdered during the surgery. She is also said to have claimed, presumably metaphorically and not literally, that she would walk into the operating theatre and she would walk out.

[111] The trial judge made no finding that Melanie lacked the full capacity to give an informed consent to the operation.

[112] In my opinion the evidence is abundant and compelling that Melanie had the same capacity as any person of full age and capacity and was entitled to be treated in the same way that any person of full age and capacity should have been treated. She is and was intelligent. She had an understanding of the proposed medical procedure. She was interested in what was going to happen, and if allowed to exercise it, she had a probing curiosity about the problems, the risks, and the surgical alternatives which might be available. She was not incapacitated in any way by emotional upset or irrational fears from being given all the information that a person of full age and capacity should have been given.

[113] It is in relation to such a patient that the standard of care required of Dr. Ashmore must be set.

XVI

INFORMED CONSENT: THE FINDINGS AND THE EVIDENCE

[114] The trial judge in this case treated Melanie's parents as the people who must give informed consent to Melanie's surgery.

[115] At para.120 of her reasons, Madam Justice Kirkpatrick said this:

> [C]ounsel for the defendants contend that the test in respect of informed consent is three-fold:
>
> (1) if the physician properly identified and discussed surgical risks with his or her patient (or, in these circumstances, with the patient's guardians), and a surgical risk results causing injury to the patient, a claim in negligence for failure to obtain informed consent will be dismissed;
>
> (my emphasis)

[116] In paras. 122 to 130 of her reasons, Madam Justice

Kirkpatrick considered the issue of informed consent. She considered the evidence of Mr. and Mrs. Van Mol and the evidence of Melanie. She said that none of them remembered any risk discussion with Dr. Ashmore. She also considered Dr. Ashmore's evidence which was that it was his practice to have a risk discussion with the parents of any child he proposed to operate on and also to have a discussion of some sort with the child. Madam Justice Kirkpatrick referred to medical literature which was put to Dr. Gillis and Dr. Cornel, and which she said was to some extent accepted by them, to the effect that, in general, patient recollection of risk discussions is poor.

[117] Madam Justice Kirkpatrick stated her conclusion in this way at para.130:

> It is exceedingly difficult to determine whether the appropriate risk discussion took place. Melanie and her parents obviously believe that no such discussion took place. Dr. Ashmore's evidence as to his recollection of discussion of risk and as to his usual practice was candid and credible. There are none of the markers of dishonesty or deception in any of their testimony upon which a finding is easily made. However, considering the evidence as a whole, I conclude that, on a balance of probabilities, Dr. Ashmore had the appropriate risk discussion with the Van Mols.
>
> (my emphasis)

[118] I have three observations about that conclusion. The first is that it was conceded by Madam Justice Kirkpatrick to have been a very close call. The second is that the finding is that "the appropriate risk discussion" took place, though Madam Justice Kirkpatrick does not identify at any point what key features would have had to be incorporated in the appropriate risk discussion, and does not find that any discussion of the technique of using prophylactic protection in the form of a Gott Shunt or bypass machine took place with anyone. My third observation is that Madam Justice Kirkpatrick found that the risk discussion took place with "the Van Mols". In the following paragraph of the reasons, para.131, it is made clear by the reference to the Van Mol's children that where Madam Justice Kirkpatrick refers to "the Van Mols" she means Mr. and Mrs. Van Mol and does not include Melanie.

[119] That leads me to these three conclusions. First, Madam Justice Kirkpatrick considered that it was with Mr. and Mrs. Van Mol that Dr. Ashmore should have had the appropriate risk discussion and obtained the appropriate consent to the surgical procedure being performed on Melanie. In my opinion that conclusion was in error in both fact and law on the mixed question of fact and law that it represents. My second conclusion is that there is no finding that any "appropriate risk discussion" took place between Dr. Ashmore and Melanie. My third conclusion is there is no finding that any risk discussion which did take place with Mr. and Mrs. Van Mol

included disclosure of the possibility of performing the third coarctation repair on Melanie with the use of prophylactic protection, or that many surgeons would have done it that way, or that the surgeons who did it that way would have considered that such a technique provided extra safety protection against the risk of paraplegia and other risks.

[120] I turn now to the evidence about the pre-operative risk discussion between Dr. Ashmore and Melanie. The background is that Melanie was vitally interested. She talked about the details of the operation a number of times with Dr. Sheila Burnside, her family physician. Dr. Burnside considered that the risk discussion and the informed consent discussion should take place with either Dr. Patterson or Dr. Ashmore. Dr. Burnside wrote to Dr. Patterson and spoke to him by telephone. She expected that Dr. Patterson or Dr. Ashmore would cover in the discussion with Melanie "the risks that the surgeons hope to avoid in the course of the operation". Dr. Patterson and Dr. Ashmore agreed that it would be Dr. Ashmore who would have whatever discussions were to take place with Mr. and Mrs. Van Mol and with Melanie. On discovery, Dr. Ashmore said this about holding a risk discussion with Melanie:

> I think we discussed what we were going to do and basically what we were going to do is what we did in the second operation and that's - I would - as I recall that's what we discussed. More precise than that I don't think I can be...I cannot recall a precise moment of sitting there and talking to her nor can I recall any more detail than that, but this is my practice and certainly in people or in youngsters of Melanie's age it is very much my practice to do that.
>
> (my emphasis)

[121] When he came to give evidence at the trial, Dr. Ashmore was asked about the risk discussion in examination in chief. The transcript indicates these questions and answers about Dr. Ashmore's general practice with children:

> Q Okay. Did you ever discuss either the risks or the benefits or both of the planned third surgery with either Melanie or either of her parents prior to the performance of that third surgery?
> A Yes.
> Q And can you tell us when you did that?
> A I can't give you chapter and verse about it, but I can tell you that it was done prior to surgery. It was also a matter of discussion that would not have been in the immediate post-operative period. This discussion -- discussion of matters of this kind --
> Q You said post-operative periods, doctor?
> A I'm sorry, pre-operative, excuse me. Matters of this kind are really a sort of continuum of information, because when you first detect that

the surgery might be necessary, as was done in Melanie's case, you start talking about the risks and benefits a long time before they get into hospital. The cardiologists do and surgeons do.

And so that the parents and the child knows why they're going to the hospital in the first place. The final discussion might -- would, of course, be in the pre-operative period, and that would be my responsibility.

But again, my lady, because of our concern about this -- the repercussions and the family dynamics and worries that this, an operation of this kind clearly generates, we have a number of other -- we have developed a number of other support systems in personnel that can also deal with questions that the family might have, indicate to them that we are aware of their concerns, give them an opportunity to discuss the matter, with people other than myself.

Now, in this case I would have no -- I had no trouble discussing this with the Van Mol family because I'm -- I know them well. We had operated twice. But I certainly would and did discuss it,including the benefits and the risks prior to surgery.

As far as Melanie's concern, we knew that she was concerned and naturally she would be. We had some information from one of her physicians in Kamloops that she had some questions. And all children have questions, teenagers more than others.

And I can enlarge on this a little bit because this is a very important problem -- not problem, but consideration for us. And that is how to deal with the discussion of major surgery with a child, as well as with the parents.

I have a sort of basic principle that I follow, basic -- I guess principle is a good way to put it. Because I've found that children want certain information. They -- first of all, they don't want to be excluded from the process. Even little children don't want to be excluded. They want to know that it's not just a bunch of adults that are making the decisions, and so they like to be involved to some extent.

Secondly, the children like to -- want to know certain things. They want to know if whoever does the operation is someone that they like or trust or have some comfort about. They want to know what's going to happen to them afterwards. They want to know if somebody is going to be there who is going to look after them. And they want to know whether it's going to hurt. So we address that in talking to the children. And they always want to know if their parents are going to be around.

So with that sort of general background, I think I always address the discussion with the child with that in mind. But then you modify it as they get older. And when you're dealing with an adolescent, such as Melanie, you've got some new problems because you, as most of us know, talking to an adolescent and trying to discuss with them what you want them to do is not necessarily an easy problem. I mean, you can't even tell them to go and clean their bedroom sometime because they don't want to do that, and they may not do that.

So you have to approach that with special considerations. But again, the most important thing I found, even with adolescents is what I mentioned previously, is that you talk to them about and convince them that there is -- there are caring people that are going to do the procedure, look after them subsequently, and then you address certain major problems.

And I always tell adolescents that there is a cause of death -- a possibility of death. And I again modify this a little bit depending on the nature of the child or patient. We tell them that there is a possibility of complications. That they may have some weakness afterwards, they may have an infection afterwards. But I don't, I don't give them the same message I give the parents.

I once discussed the concerns about an operation with a 15 year old boy, giving it my very best approach, and that night he disappeared and he wasn't in the hospital. And he vanished for three days. Nobody saw him. Including his parents, for three days.

We finally found him and he came back and we finally operated on him and he was fine. We closed the hole in his heart. The only reason I mention that is that this is a complex problem that we have to deal with.

So that's a very long answer to your question, but yes, we do -- I did discuss this with Melanie. Melanie and I discussed a lot of things, but we discussed this. And oh, I should mention, of course, Melanie also discussed this matter -- tragically she was involved in making a film that -- where we -- the essence of the film, the video, was so that adolescents could discuss their concerns about surgery prior to the surgery, and she was involved in that procedure.

(my emphasis)

[122] More precisely, with respect to Melanie herself, the transcript gives these questions and answers in examination-in-chief:

Q Did you ever speak with Melanie, in the absence of her parents, prior to her third operative procedure, to discuss the risk and benefits?

A Well, I think I did. I don't have a recollection of the context so much as I do, I remember sort of sitting on her bed in the hospital before hand, and I think that was in response to, was Dr. Burnside's letter -- well, not totally, but Dr. Burnside had mentioned Melanie's concerns.

I have a recollection of sitting in her bed in her room and talking about this, and I must say I have a recollection that that was with -- by herself. I may well have talked to her in addition with her parents present. I can't say precisely.

Q What did you discuss with Melanie in terms of risks and benefits?

A Well, again, I -- she wanted to know what we were going to do. So I told her what we would be doing. We would try to replace the -- or to repair the narrowed area and that we would put another patch on it, in all likelihood. And that we would hope that this would be the last time she would ever have to bother with it again.

She knew the possibility of death, and I would mention that, although I don't suppose I would dwell on it. But I would say, you know, there can be a situation where you might not survive. But we have -- we don't have that very often, and it's uncommon.

And I would say to her that there was possibility of damage to her other organs.

My lady, I must say, I can't specifically recall, in Melanie's case, whether I talked about paraplegia or not. I did to the parents, talk about spinal cord damage. But I'm not sure if I did with Melanie. Again, bearing in mind what I said before the break, that this is a difficult area, but I probably did.

(my emphasis)

[123] It is, I think, clear from Dr. Ashmore's choice of words: "I think I did"; "I have a recollection..."; "I would mention that..."; "I would say to her..."; "this is a difficult area but I probably did"; that Dr. Ashmore did not actually remember any risk discussion with Melanie herself beyond a few words of reassurance as he sat on her bed, and that from his reassuring approach to children generally, and his guarded approach to discussions with adolescents, that any conclusion drawn from his general practice with children could not support a conclusion that a proper risk discussion had taken place with Melanie herself, even if one had taken place with her parents. It must be remembered that Dr. Ashmore's general practice with children was developed for its suitability for use in a children's hospital where Dr. Ashmore had practised for some

years. It may not have been suitable for a sixteen-year old of full consenting age and capacity.

[124] In the circumstances, the evidence is compelling that Dr. Ashmore did not discuss with Melanie the possibility of using prophylactic protection, either in the form of a bypass machine or a Gott Shunt used prophylactically. The surgical alternative methods were not discussed with Melanie at all. Nor was it said that the use of a cardiopulmonary by-pass machine could provide extra safety and risk reduction in the operation. The evidence is also compelling that Dr. Ashmore did not advise Melanie that many surgeons adopted those means for extra protection and that she had the option of having that protection during the surgery either as performed by himself or as performed by another qualified surgeon who would be willing to use those prophylactic measures.

[125] The evidence is also compelling that neither the three surgical alternatives nor the use of prophylactic protection "for extra safety" was discussed by Dr. Ashmore with Mr. or Mrs. Van Mol.

XVII

INFORMED CONSENT: SUMMARY AND CONCLUSIONS

[126] In my opinion, Melanie, at the age of sixteen years and three months at the time of her operation, and being an intelligent person with a good understanding of medical procedures and a lively curiosity about her own health, was the only person who could give the required informed consent to this third coarctation repair operation being conducted by Dr. Ashmore.

[127] As part of the process of obtaining informed consent, Dr. Ashmore was required to tell Melanie about the three alternative methods for this third coarctation repair operation including the methods that were available and in widespread use of using a bypass machine or other prophylactic protection when performing this operation, particulary when, as here, dense adhesions and a friable aorta should have been, and were, anticipated. Dr. Ashmore should have made it possible, as well, for Melanie to exercise a choice to ask for prophylactic protection, either by asking Dr. Ashmore to use it, or by asking for a second opinion and for help in finding a well qualified surgeon to perform the operation using that prophylactic protection.

[128] Dr. Ashmore did not engage in such a discussion with Melanie and in failing to do so he was, in the circumstances, in breach of a duty of care to her. He deprived her of the opportunity to make an informed choice of having the operation performed with prophylactic protection in place.

[129] If Melanie had been given the information that she ought to have been given, then, had she been the person contemplated in the modified objective test established in

Reibl v. Hughes and reaffirmed in Arndt v. Smith, the evidence is compelling that she would have opted for the use of prophylactic protection in the form of a bypass machine which was in widespread use, perhaps even in universal use, by younger surgeons for such an operation. If Melanie had opted for the use of the bypass machine "for extra safety" then, the risk of no blood flow to the spine and lower limbs following a tear in the aorta while cross-clamping would have been very much reduced and, on a balance of probabilities, her lower body paralysis would not have occurred. See Farrell v. Snell, [1990] 2 S.C.R. 311.

[130] In short, the breach of duty of Dr. Ashmore in relation to failure to have an adequate risk discussion with Melanie resulting in depriving her of the choice of having a bypass machine available or employed in her third coarctation repair operation was the cause in fact and in law of her paraplegia.

XVIII

LARYNGEAL NERVE DAMAGE

[131] As well as suffering from non-functional flaccid paraplegia as a result of what occurred during the surgical operation, Melanie also suffered injury to her recurrent laryngeal nerve. That nerve damage has left her with a somewhat hoarse voice which she has difficulty in modulating. Her claim against Dr. Ashmore included a claim in relation to the laryngeal nerve damage.

[132] There is no doubt that the laryngeal nerve damage occurred during the operation. The damage is near where the tear occurred in the aorta and where the dissection was being performed, first by Dr. Ashmore and then by Dr. LeBlanc, in order to try to control the damage from the tear and to remedy the coarctation. Dr. Ashmore was working to remedy the tear for 90 to 110 minutes and, after Dr. LeBlanc took over, the operative procedure required about another 40 to 45 minutes before the blood flow was restored to Melanie's spine and lower limbs.

[133] The precise moment when the damage to the laryngeal nerve occurred cannot be determined, nor can it be determined whether the damage occurred when Dr. Ashmore was the active surgeon or when Dr. LeBlanc was the active surgeon. But in my opinion, it is not necessary to decide those questions. For the same reason that it is correct to say that the breach of duty of Dr. Ashmore in relation to failure to hold an adequate risk discussion with Melanie, resulting in depriving her of the choice of having a by-pass machine available or employed in her third coarctation repair operation, was the cause in fact and in law of the paraplegia, it is also correct to say that the same failure was the cause in fact and in law of her laryngeal nerve damage. If Melanie had opted for the use of the by-pass machine for "extra safety" then much of the extra dissection would have been unnecessary, and, on the balance of

probabilities and on the principle in Farrell v. Snell her laryngeal nerve damage would not have occurred.

[134] In my opinion, the damage to the laryngeal nerve constituted a compensable head of damage in Melanie's claim against Dr. Ashmore.

XIX

SYNOPSIS

[135] In these reasons I have reached no conclusion contrary to the primary findings of fact of Madam Justice Kirkpatrick, the trial judge.

[136] With respect to Madam Justice Kirkpatrick's mixed findings of fact and law in relation to the first ground of claim, I have reached no conclusion contrary to her conclusion that Dr. Ashmore was not negligent in adopting the surgical procedure that he adopted, in embarking on the operation without a system of prophylactic protection in place, or in the deployment of his skills throughout his involvement in the operation until he was relieved by Dr. LeBlanc. I have made four observations in relation to facts or to mixed fact and law, and I have reached two conclusions on the first ground of claim, all as set out in Part XI of these reasons. The first of my conclusions, namely that there were at least three separate and distinguishable surgical alternatives for conducting this third coarctation repair operation cannot be disputed on the evidence. The second of my conclusions, namely that the surgical alternative of using a cardiopulmonary by-pass machine, which would provide "extra safety", is supported by Dr. LeBlanc, by all three of the plaintiff's expert witnesses, and by Dr. Trusler, the principal expert witness called by the defendants. Both of those conclusions support my reasons on the second ground of claim, but only the first is necessary to find liability in relation to the failure to obtain a relevant informed consent. The trial judge made no finding of fact, or of mixed fact and law in any way inconsistent, expressly or implicitly, with either of those two conclusions.

[137] With respect to the mixed findings of fact and law of Madam Justice Kirkpatrick on the second ground of claim, namely that Dr. Ashmore had a legally proper, appropriate and effective risk discussion with "the Van Mols", and did not commit any breach of duty in that respect, I have set out my opinion on two legal questions which were not addressed by the trial judge and which make the trial judge's conclusion, in relation to the adequacy of the risk discussion, insupportable as a matter of law. My first opinion is that Melanie was the only person capable of giving informed consent to the surgical procedure when it took place, or when she was first admitted to hospital for the carrying out of that procedure. My second opinion is that any legally proper risk discussion with a person such as Melanie, with the capacity to give informed consent, was required, in law, to include a statement of the

three alternative surgical methods of carrying out this third coarctation repair operation with guidance about the risks and advantages of each procedure. That risk discussion ought to have included a statement that the by-pass machine alternative provided "extra safety", but the failure to make that statement is not necessary to the finding of liability that I have made. I have applied my answers to those two legal questions to the facts, either as found by the trial judge or as clearly supported by the evidence where the relevant facts were not considered by the trial judge, to reach my conclusion on liability with respect to the second ground of claim, including both liability for the paraplegia losses and for the laryngeal nerve losses.

[138] Throughout my reasons I have endeavoured to remain within the boundaries of the proper function of a court of appeal judge as those boundaries have been carefully set by the Supreme Court of Canada in a series of cases over the last twenty years, as summarized in Part IV of these reasons.

XX

DISPOSITION

[139] I would allow this appeal, find liability on the part of Dr. Ashmore on the basis I have described, and refer this case back to the Supreme Court of British Columbia for an assessment of damages.

"The Honourable Mr. Justice Lambert"

These reasons, and the concurring reasons of Madam Justice Huddart, constitute, respectively, the written opinions on this appeal of myself and Madam Justice Huddart. They were signed and delivered to the registrar, in accordance with s-s.21(2) of the Court of Appeal Act, on Thursday, 10 December, 1998.

"10 December 1998"

_____

December 10, 1998 "The Honourable Mr. Justice Lambert"Reasons for Judgment of the Honourable Madam Justice Huddart:

[140] I agree with the reasons of Mr. Justice Lambert and with his proposed disposition of this appeal. I am writing these

short concurring reasons only to explain my agreement in view of my comments in Ney v. Canada (Attorney-General) (1993), 102 D.L.R. (4th) 136 about the potential existence of concurrent rights to consent in parents and child. My concern in Ney arose from the comments of Lord Donaldson M.R. in Re: R., [1991] 4 All E.R. 177 (C.A.) at 185 to 186 about the right of parents to consent to treatment in circumstances where their competent child did not consent or was not asked.

[141] The view my colleague expressed succinctly at paragraph [89] flows from the principle of law identified by Lord Scarman in Gillick v. West Norfolk and Wisbech Area Health Authority, [1986] A.C. 112 at 186:

> The underlying principle of the law was exposed by Blackstone (1 Bl Com (17th edn, 1830) chs 16 and 17) and can be seen to have been acknowledged in the case law. It is that parental right yields to the child's right to make his own decisions when he reaches a sufficient understanding and intelligence to be capable of making up his own mind on the matter requiring decision.

[142] Concurrent rights to consent were posited by Lord Donaldson as necessary to resolve the doctor's "intolerable dilemma" when facing parents who seek treatment the child refuses.

[143] I do not consider Lord Donaldson's proposed judicial modification of the common law to be necessary or desirable. The dilemma is no different to that faced by doctors and all others required to deal with mentally disabled adults, as Lord Donaldson recognized at 186 in Re R. It requires not a legal resolution but a factual decision. Is this person with whom I am dealing capable of consenting to what I am proposing? In both cases courts may override the refusal of treatment upon appropriate application, just as a court may be called upon to resolve a dispute between parents with concurrent rights to give consent to treatment of a child who is not competent to give consent to the treatment being proposed. In the case of a person under 19 years of age in British Columbia, the ultimate resort is to the parens patriae jurisdiction of the Supreme Court.

[144] Unlike Lord Donaldson, I do not read section 16 of the Infants Act, R.S.B.C. 1979, c. 196, (the equivalent as it was in 1990 to section 8 of the Family Law Reform Act (1969) to which he was referring at 186) as inconsistent with the common law.

[145] I agree with Mr. Justice Lambert that section 16 did no more than provide options to a medical practitioner who had doubts about the capacity of an infant who had attained 16 years to consent to proposed treatment. An attempt to secure a parent's consent or the obtaining of a second opinion would protect the medical practitioner from an action for battery or an assault charge. As Mr. Justice Lambert notes, there is

nothing in the section to substitute the consent of a parent for the consent of a competent 16-year old. Nor is there anything in the section to permit treatment when a competent infant of any age refuses, or to permit a medical practitioner to avoid facing the question by seeking only the consent of one or both of the parents. I also agree that the 1979 Act is simply not relevant to the issue of negligence as it relates to consent.

"The Honourable Madam Justice Huddart"

Dissenting Reasons of the Honourable Mr. Justice Goldie

[146] I have had the privilege of seeing in draft my colleagues' reasons for judgment in this tragic and difficult case. As I am unable to concur in their disposition of this appeal, I have found it necessary to explain why at some length.

[147] Two grounds of negligence were alleged on the part of the surgeon: firstly, negligence in the planning and performance of the operation which took place 26 February 1990, and secondly, negligence in the disclosure of risks of the operation resulting in a lack of informed consent.

[148] It appears that Melanie Van Mol is in substance the principal appellant and for this reason I refer to the appellant in this Court in the singular. When I refer to the parties in the court below I will refer to them collectively in the plural.

[149] My reasons are arranged in the following manner:

V. CONCLUSION

I. INTRODUCTORY SUMMARY

[150] As I understand the judgment of my colleague Mr. Justice Lambert, he has found:

a. the findings of fact and law made by the trial judge in reaching her conclusion that the conduct of the surgeon fell within the acceptable standard of an ordinary cardiac surgeon acting with prudence and diligence are subject to four observations and two conclusions;
b. that as the law stood in February, 1990 when the operation was performed on her, Melanie (and I will follow the practice of referring to Ms. Van Mol by her given name) was the only person who could consent to the operation; and
c. the trial judge's finding that the appropriate risk discussions took place may be disregarded and the surgeon found negligent in failing to have an adequate risk discussion with Melanie.

[151] In both Parts XI and XIX of his reasons my colleague disclaims any intention of substituting his opinion on the first ground of claim for that of the trial judge. However, and with respect, I am of the view my colleague has indeed substantially substituted an appellate opinion for that of the trial judge on the first ground of claim. As his observations and conclusions influence his analysis of the second ground of claim, I must start with them.

[152] As a preface to this examination I note that the contest in respect of the first ground of alleged negligence was between medical experts. No findings of credibility were necessary. By way of contrast, it will be seen that the issue raised in the second ground of alleged negligence could only be resolved at trial by a finding of credibility.

[153] There had been extensive pre-trial discovery of the principal medical defendants. The reports of the experts retained by the parties had been exchanged. Five testified at the trial as did three of the medical defendants. To discharge her responsibility as the trier of fact the trial judge had the assistance of these experts and of experienced counsel. It is accepted Toneguzzo-Norvell (Guardian ad litem of) v. Burnaby Hospital, [1994] 1 S.C.R. 14 ("Toneguzzo") provides authoritative direction to this Court where the findings to which the trial judge has applied the law are questioned on appeal.

[154] Two extracts at 121-2 in Toneguzzo are quoted in paragraph [8] of Mr. Justice Lambert's judgment. For convenience I set them out again here. The authorities omitted in the first paragraph of his quotation are included as I think the second quoted paragraph is better read in light of those

authorities:

> It is by now well established that a Court of Appeal must not interfere with a trial judge's conclusions on matters of fact unless there is palpable or overriding error. In principle, a Court of Appeal will only intervene if the judge has made a manifest error, has ignored conclusive or relevant evidence, has misunderstood the evidence, or has drawn erroneous conclusions from it: see P. (D.) v. S. (C.), [1993] 4 S.C.R. 141, at pp. 188-89 (per L'Heureux-DubÇ J.), and all cases cited therein, as well as Geffen v. Goodman Estate, [1991] 2 S.C.R. 353, at pp. 388-89 (per Wilson J.), and Stein v. The Ship "Kathy K", [1976] 2 S.C.R. 802, at pp. 806-8 (per Ritchie J.). A Court of Appeal is clearly not entitled to interfere merely because it takes a different view of the evidence. The finding of facts and the drawing of evidentiary conclusions from facts is the province of the trial judge, not the Court of Appeal.
>
> ...
>
> I agree that the principle of non-intervention of a Court of Appeal in a trial judge's findings of facts does not apply with the same force to inferences drawn from conflicting testimony of expert witnesses where the credibility of these witnesses is not in issue. This does not however change the fact that the weight to be assigned to the various pieces of evidence is under our trial system essentially the province of the trier of fact, in this case the trial judge.
>
> [Emphasis added]

[155] From a chronological examination of the quoted authorities it will be seen Toneguzzo is the culmination of a series of pronouncements by the Supreme Court of Canada.

[156] Stein v. The Ship Kathy "K", supra, is known for the phrase "palpable and overriding" error as descriptive of the magnitude of the error required before appellate intervention is allowed where credibility is involved in the findings of fact. In Geffen v. Goodman Estate, supra, Madam Justice Wilson characterized the approach of the Supreme Court to findings of fact not contingent on credibility as "non-interventionist" unless "a manifest error" had been made. In P.(D.) v. S.(C.), supra, at 188-189 Madam Justice L'Heureux-DubÇ succinctly summarized the scope of appellate intervention:

> It is well-settled case law that a court of appeal will only intervene in a trial judge's findings of fact if the judge has made a manifest error, ignored conclusive or relevant evidence, has misunderstood the evidence or drawn erroneous conclusions from it.

She directed the reader to some ten judgments of the Court.

[157] These principles have been applied in virtually every circumstance. Stein v. The Ship Kathy "K" was a maritime collision case; Geffen involved the presumption of undue influence, and in P.(D.) v. S.(C.) the issue was the right of access to a minor child by a non-custodial parent.

II. THE FOUR OBSERVATIONS

1. The first observation

[158] The first of my colleague's four observations is found in paragraph [65] of Part XI of his judgment. My colleague states that while there is evidentiary support for the view that Dr. Ashmore's plan was not contrary to all qualified medical opinion in 1990, a "very extensive body of evidence" exists that the operation should have been conducted with prophylactic protection in place or immediately available, either in the form of a bypass machine or a Gott shunt.

[159] In paragraph [33] he described Dr. Ashmore's plan as contemplating cross-clamping without anything else. I think the better description of the surgeon's plan is found in paragraph [19] of my colleague's reasons where he describes the purpose of a Gott shunt and notes the circumstance under which the surgeon would have used it.

[160] As to its suitability for providing protection Dr. LeBlanc, whose evidence on discovery was characterized by counsel for the appellants as "forthright and fair", said at trial:

Q Dr. LeBlanc, is Gott shunt a reasonable alternative to use during a third repair of coarctation in another surgeon's hands?

A Yes, it's totally an appropriate option for bypass, doing a repair of a coarctation, meaning to bypass the area where it's clamped. So a Gott shunt is an appropriate option that has been used. In fact, even before cardiopulmonary bypass at the beginning of open heart surgery.

I have been trained to use cardiopulmonary bypass because my training is just maybe 10, 12 years ago and at that time where I was, I didn't see the use of Gott shunt. So I obviously feel more comfortable myself with cardiopulmonary bypass.

But in the hands of many experienced surgeons, Gott shunt is extremely appropriate to do this type of operation, with the same protection, which means we're looking at providing blood to the lower half of the body to avoid the problem of paraplegia and bleeding.

[161] Whether the surgeon should have had available the cardiopulmonary bypass machine instead of the Gott shunt was a

contested issue at the 35 day trial and in this Court.

[162] In paragraph [65], my colleague parenthetically alludes to the appellant's contentions with respect to two expert witnesses called by the respondents. These exactly illustrate some of the considerations the trial judge had to take into account. There is no indication she did not.

[163] As to his description of the evidence of a particular point as "a very extensive body of evidence", I note the same adjective was used by the trial judge to describe the totality of all the evidence on the circumstances of Melanie's case. To apply such a characterization to some evidence which she did not accept infringes on the area of responsibility assigned to her by Toneguzzo. It was for her to make a qualitative analysis and in my view no fault was demonstrated in this Court which supports a conclusion she was plainly wrong in her assessment of the medical evidence. As Madam Justice McLachlin said in Toneguzzo at 121:

> The finding of facts and the drawing of evidentiary conclusions from facts is the province of the trial judge, not the Court of Appeal.

[164] I am unable to agree my colleague's first observation is relevant. It discloses no manifest error on the part of the trial judge nor any oversight, misunderstanding or error in the conclusions she drew.

2. The second observation

[165] My colleague states in his paragraph [66] that the trial judge seems to have misapplied the evidence with respect to the risk of paraplegia. She is said to have drawn an incorrect conclusion in applying a factor of .41% to the risk of paraplegia in Melanie's case. Reference is made to paragraphs 121 and 131 of her judgment. Dr. LeBlanc's evidence is relied upon as indicating an increase in risk to 3% to 4% in the case of a third repair coarctation. My colleague's observation is that his best view of the evidence is that the risk of paraplegia in Melanie's case must have been 1% to 4%. At the upper limit, this is an order of magnitude greater than that quoted by the trial judge.

[166] In her paragraph 121, the trial judge was in the midst of her analysis of the evidence on the second ground of alleged liability - the adequacy of the risk disclosure. She refers to the .41% statistic as support for her conclusion that the risk of paraplegia must be disclosed.

[167] In her paragraph numbered 131, the trial judge did not use this statistic - which reflects historical experience - in her analysis of the risk of paraplegia. She was there applying the modified objective test set out in Hopp v. Lepp, [1980] 2 S.C.R. 192 and Reibl v. Hughes, [1980] 1 S.C.R. 880 ("Reibl") to which recourse is had in the event actual consent was inadequate. (I will come to this in due course.) After concluding that Dr. Ashmore had the appropriate risk discussion

with the Van Mols she stated:

> If I am wrong in making that finding, I would nevertheless find that if the risk was discussed, the Van Mols would have consented to the surgery. It is instructive to note that it is whether they would have accepted the risk of paraplegia, not its inevitability. The Van Mols are intelligent, thoughtful people. They trusted the doctors. They expected that the third surgery would go as well as the other surgeries. Like the vast majority of parents, they understand, in a visceral way, that their children are hostages to fate. All that can be done is to be as protective and vigilant as it is reasonable to be. The risk of paraplegia was statistically .41%. Dr. Ashmore had never had a surgery resulting in paraplegia. Given the complications faced by Melanie in the absence of the surgery, it was a risk that a reasonable individual would accept.

[168] If the statistical risk to Melanie at the hands of this surgeon was derived from his experience alone, the result would be zero. In the hands of the surgeons who made up larger samples, the evidence disclosed a range.

[169] One of the experts, Dr. Trusler, said at page 5 of his report:

> There is a risk of paraplegia or spinal cord damage with any coarctation operation. This risk is generally about 0.4% (4 per 1000 operations) (Kirklin and Barratt-Boyes, Brewer at al).
>
> Incremental risk factors are the lack of development of collateral circulation and a re-repair.

And at page 4 he said of recoarctation surgery:

> The fact that it is a third operation would not change these indications. There is a big difference between the clean, pristine field of the first operation and the obscure, adhesed field of the second operation. Third and fourth and fifth operations are not that much different than the second and the indications and approaches do not necessarily change. In general, each operation tends to be a little more difficult than the one before, but the difference is marginal. Occasionally I have seen adhesions that were easier to cope with at the third operation than at the second procedure. This experience is based on a lot of reoperations over the years.

[170] Dr. Trusler was cross-examined on a learned article in which there appeared the sentence: "The risk is also increased at re-repair." He agreed with this but quantified the increase in the risk in the following words:

> A Well, I've always thought that was correct,

although it was pointed out recently that the risk is not -- the numbers are not that great in recent years. It is something from .4 percent to .6 percent. I would have thought it would have been higher, but that reference is Lyman Brewer's reference back in 1972 when he reviewed those, how many cases, 10,000 cases?

Q 12,000.

A 12,000 cases that he found that the -- that re-repair was an incremental risk factor for paraplegia.

[171] Dr. Miyagishima, an expert called by the plaintiffs, said in his testimony in chief the morbidity, or ratio of sick to well, of paraplegia resulting from ischemia of the spinal cord was, as stated in textbooks he did not identify, one-half of one percent to one percent.

[172] Moreover, I am of the view the evidence of Dr. LeBlanc is not supportive of the conclusion that the risk of the third operation on Melanie was 3% or 4%. He testified at the trial:

Q Now, could I take you then back to your examination for discovery that Mr. McAlpine read to you, the second volume. He read to you question 638, among others, and that question is relative to the risks of paraplegia. Question is -- he asked if "those risks were something that were known to you before 1990?":

> A Oh, yeah, they're the same risk in the range of one to three per cent.

Now, where do you get the one to three percent from?

A The risk of paraplegia in patients that have arch problem varies from .4 to .5, in a patient with coarctation and good supply, to 3 to 4 percent as the patient gets older or -- and has had previous coarctation repair. So in a baby, the risk is very minimal. On an older patient with large collaterals the risk is minimal. On a patient that has a second, a third, a fourth operation the risk will increase slightly.

The reference to question 638 is explained in the sequence of questions which culminated in that question:

634 Q Did you explain to the parents in the course of this operation that there was a risk of paraplegia?

A We always do.

635 Q You don't say we, I'll deal with you; that's something you always raise in the course of a recoarctation repair?

A Yes, it's something we always raise.

636 Q And when you say we, I just want to deal with you for a second, you raise it, do you use the word paraplegia, in other words,

bring it home in laymen's terms?

A I tell them it means the kid is paralyzed, the legs don't move because they may not understand like you say what paraplegia means but they do understand what paralysis means.

637 Q Yes. And why is that something you tell the parents?

A Because it's a definite risk with the devastating consequences that you're aware of.

638 Q Yes. And those risks were something that were known to you before 1990?

A Oh, yeah, they're the same risk in the range of one to three percent.

[173] In the discovery evidence to which Dr. LeBlanc was referred, he was speaking of a second operation on a child which took place only eight months after the first and which involved the arch of the aorta. Repair of the arch was not required in Melanie's case.

[174] In the answer given by Dr. LeBlanc first referred to above he continues to refer to arch repair. Other evidence of which the trial judge was aware demonstrated the risk of paraplegia was largely affected by the state of the patient's collateral blood supply. It is to this Dr. LeBlanc referred in the sentence "On an older patient with large collaterals the risk is minimal". (At the B.C. Children's Hospital an "older patient" is one 16 years or older.) The collateral blood supply is the body's response to the high blood pressure created by the constriction of the aorta.

[175] Dr. Penkoske, another surgeon qualified as an expert in pediatric cardiac surgery, explained this relationship in these words:

Q ... In Melanie's case, prior to her third coarctation repair, what would you have anticipated her collateral supply to be like?

A I would anticipate in a child who has a gradient of 45 to 50 at rest on a cardiac catheterization prior to a third operation, which was the clinical status of Melanie's coarctation, that she would have well developed collaterals. The fact that a couple of collaterals were divided at the time of the second operation, almost nine years -- seven years previously, nine years previously, I'm sorry, does not negate the fact that she had nine years over which time a coarct recurred and there was ample opportunity for collateral vessels to redevelop.

Q Does the time play any role in the development of collaterals?

A Definitely.

Q What role does the time play?

A If one has no time, for example, in the case of acute aortic transection with an automobile

> accident, there is no time for collateral vessels to develop. Collateral vessels develop when an obstruction is present for a period of time, and the collateral vessels which are just really enlargements of normal vessels has an ample period of time to occur.

[176] For present purposes it is sufficient to note that the presence and strength of the collateral blood vessels was discussed by virtually every expert. The trial judge in paragraph 93 of her reasons found Dr. Ashmore's plan provided for the contingency of poorly developed collaterals. That finding was not challenged.

[177] As there is no indication the trial judge measured the risk actually confronting Melanie by such a yard stick, I am unable to agree with my colleague's second observation. For the reasons I have summarized above I am of the view it does not disclose any error in the trial judge's finding that the surgeon's conduct fell within the acceptable standard of an ordinary cardiac surgeon acting with prudence and diligence.

3. The third observation

[178] My colleague's third observation is set out in paragraph [67] of his reasons for judgment. However, as a preliminary comment I wish to note here the appellant's third ground of appeal expressed in these terms:

III. In the alternative, the trial judge erred in failing to find that the standard medical practice to which Dr. Ashmore conformed was itself negligent.

[179] As will be seen this alleges what has come to be referred to as the ter Neuzen exception. I will endeavour to show this provides a context overlooked in my colleague's suggestion elsewhere in his judgment that the trial judge had difficulty in reaching her conclusion on the first ground of negligence.

[180] In paragraph [58] of my colleague's reasons he refers to the appellant's submission in this Court, made by way of an overview,

> ... that the error said to have been made by the trial judge must be assessed that she, herself, said that an "exceedingly fine line" must necessarily be drawn and the assessment of this first ground required "long and anxious consideration". It was argued that if the trial judge had not made the particular specified errors in relation to the evidence, then she may well have reached a conclusion on the other side of the "exceedingly fine line".

[181] These words in quotation marks are taken from paragraph 111 of the trial judge's reasons for judgment. In paragraph [45] my colleague says in part:

> ... I think it is fair to say that the words "an exceedingly fine line" and the words "after long and anxious consideration" must be taken to incorporate

into Madam Justice Kirkpatrick's reasons an indication that the plaintiff must have come very close to establishing her case on a balance of probabilities, as she is required to do, but to have fallen just short in Madam Justice Kirkpatrick's opinion.

[182] I believe this is a contextually incorrect reading of paragraph 111, and as it appears to have persuaded my colleague to draw evidentiary conclusions at variance with the findings in the court below, it becomes necessary to examine this at some length.

[183] For convenience I reproduce at this point paragraphs 105, 108, 109, 110 and 111 of the trial judge's reasons:

105 Based upon all of the evidence, I conclude that there was, in 1990, no one acceptable operative procedure nor one accepted method of ensuring protection of the spinal cord in the repair of a third coarctation. Indeed, from the review of the various expert opinions and the medical literature discussed by the doctors at trial, it is evident that there are several acceptable operative procedures and acceptable approaches for the protection of the spinal cord. Further, it is clear that Dr. Ashmore's operative approach was one of several acceptable approaches consistent with an established body of medical opinion.

...

108 Counsel for the plaintiffs argue that Dr. Ashmore's practice is one which is fraught with risks so obvious and easily avoided that the court ought to reject it as dangerous, unreasonable and negligent. In order to do so, however, it would be necessary to find that this case falls outside the general rule (and within the exception) laid down in ter Nuzen [sic] at p. 220:

> ...as a general rule, where a procedure involves difficult or uncertain questions of medical treatment or complex, scientific or highly technical matters that are beyond the ordinary experience and understanding of a judge or jury, it will not be open to find a standard medical practice negligent. On the other hand, as an exception to the general rule, if a standard practice fails to adopt obvious and reasonable precautions which are readily apparent to the ordinary finder of fact, then it is no excuse for a practitioner to claim that he or she was merely conforming to such a negligent common practice.

109 Counsel for the plaintiffs contend that, once the available options are explained for the court by

the medical experts, the issue of protection of Melanie's spinal cord and whether she was exposed to unreasonable risk, can be resolved without specialized medical knowledge or experience. In my opinion, this submission must fail. The circumstances in Melanie's case giving rise to the allegation of negligence are qualitatively different from that posed in, for example, Anderson v. Chasney, supra, in which sponges were not removed after tonsillectomy surgery and the child suffocated. Nor are they of the kind found in Stubbins v. Johnson, supra, in which the court rejected the contention that the defendant doctor's decision to proceed with a second radial keratotomy surgery was an accepted "school of thought." In Stubbins, the defendant, within a matter of days after a first surgery which resulted in an injured eye, proceeded with the second surgery which resulted in the plaintiff being rendered functionally blind.

110 Considering the very extensive and complex medical evidence heard in this case, I conclude that Melanie's condition involved difficult and uncertain questions of medical treatment, as evidenced by the conflicting schools of thought on the best approach to repair a recoarctation and to ensure adequate spinal cord perfusion. At a superficial level, and with the clarity of hindsight, it may seem obvious that cardiopulmonary bypass might have protected Melanie's spinal cord and prevented her paraplegia. But if one assesses the circumstances of Melanie's extensive medical history, Dr. Ashmore's intimate knowledge of her medical circumstances, the operative site as it was known in January, 1979 and as it presented in February 1990, the risks and benefits of the various approaches, and Dr. Ashmore's skill and knowledge as a surgeon, the decision to employ spinal protection prophylactically is not, as required by ter Nuzen, "obvious nor readily apparent." Furthermore, I am unable to conclude that "the obvious and reasonable precautions" were themselves without risks, or that, if employed, they would have necessarily prevented Melanie's paraplegia.

111 Based on all of the evidence, it is clear that the decisions made in Melanie's case involved the assessment and weighing of a multitude of complex factors, both prior to the surgery and intra-operatively. Dr. Ashmore brought to that unenviable task enormous skill and experience. In hindsight, he was tragically mistaken in his choice of approach. Dr. Ashmore's surgical plan did not take into account a rare and exceptional occurrence - the tear in the aorta at the time of cross clamping. Notwithstanding the application of diligence, care, knowledge, skill and caution, Melanie has suffered the tragic results of Dr. Ashmore's inability to foresee what occurred.

But the law does not impose a standard of perfection upon doctors. They cannot be expected to be the predictors of the rare and exceptional occurrence. This, of course, provides no comfort or solace to Melanie who must live with the consequences of the strictures of an imperfect standard. It is an exceedingly fine line which must necessarily be drawn. However, after long and anxious consideration, I conclude that Dr. Ashmore's conduct fell within the acceptable standard of an ordinary cardiac surgeon acting with prudence and diligence.

[Emphasis added]

[184] It does not appear that paragraphs 108 and 109 of the trial judgment which were omitted from those quoted by my colleague in his paragraph [45], formed part of his analysis. In my view, it is apparent from paragraphs 108 and 109 the trial judge is responding to the plaintiffs' submission that Dr. Ashmore's adherence to a standard medical practice was in itself negligence as falling within the exception to standard medical practice reviewed in Kobe ter Neuzen v. Dr. Gerald Korn (1993), 81 B.C.L.R. (2d) 39 (B.C.C.A.), decided in this Court in November, 1993. (I will refer to this case as "ter Neuzen".) The claim in negligence against Dr. Korn, practising as an obstetrician and gynaecologist, was made because the plaintiff became infected with the HIV virus during the course of artificial insemination procedures administered by him. A jury found liability. The trial judge had instructed the jurors that it was open to them, as the triers of fact, to find the custom or general practice negligent.

[185] The direction thus stated was not approved by this Court. A new trial was ordered as there were several bases for liability and which one of these the jury had chosen could not be ascertained.

[186] An appeal was taken by the plaintiff to the Supreme Court of Canada. It was dismissed: [1995] 3 S.C.R. 674, 11 B.C.L.R. (3d) 201. (I will refer to the latter report as it was that used by the trial judge in her reasons.)

[187] Mr. Justice Sopinka, speaking for himself and five other members of the seven judge panel, examined the role of the trier of fact both where the defendant doctor relies upon an adherence to standard practice and where it is alleged such adherence is itself evidence of negligence. As to the first Sopinka J. said in part at 214 and 216:

33 It is well settled that physicians have a duty to conduct their practice in accordance with the conduct of a prudent and diligent doctor in the same circumstances. In the case of a specialist, such as a gynaecologist and obstetrician, the doctor's behaviour must be assessed in light of the conduct of other ordinary specialists, who possess a reasonable level of knowledge, competence and skill expected of professionals in Canada, in that field. A

specialist, such as the respondent, who holds himself out as possessing a special degree of skill and knowledge, must exercise the degree of skill of an average specialist in his field: see Wilson v. Swanson, [1956] S.C.R. 804 at 817, Lapointe c. Hìpital Le Gardeur, [1992] 1 S.C.R. 351 at 361, and McCormick v. Marcotte (1971), [1972] S.C.R. 18.

...

38 It is generally accepted that when a doctor acts in accordance with a recognized and respectable practice of the profession, he or she will not be found to be negligent. This is because courts do not ordinarily have the expertise to tell professionals that they are not behaving appropriately in their field. In a sense, the medical profession as a whole is assumed to have adopted procedures which are in the best interests of patients and are not inherently negligent....

[188] And at 220, after considering Anderson v. Chasney, [1949] 2 W.W.R. 337 (Man.C.A.), aff'd [1950] 4 D.L.R. 223 (S.C.C.), he said:

51 I conclude from the foregoing that, as a general rule, where a procedure involves difficult or uncertain questions of medical treatment or complex, scientific or highly technical matters that are beyond the ordinary experience and understanding of a judge or jury, it will not be open to find a standard medical practice negligent. On the other hand, as an exception to the general rule, if a standard practice fails to adopt obvious and reasonable precautions which are readily apparent to the ordinary finder of fact, then it is no excuse for a practitioner to claim that he or she was merely conforming to such a negligent common practice.

[189] Returning to the case at bar, I think it is clear from paragraphs 110 and 111 of her judgment the trial judge was considering the plaintiffs' contention that Dr. Ashmore's conduct fell within the above exception to the general rule.

[190] In my view the trial judge, "after long and anxious consideration", decided Dr. Ashmore's planning and conduct of the operation did not come within the ter Neuzen exception to the general rule. From that it followed the standard by which he was to be judged was that of an ordinary cardiac surgeon acting with prudence and diligence. This is what she said in paragraph 133 of her reasons:

133 I conclude that the conduct of Dr. Ashmore and Dr. Patterson falls within the standard of, respectively, an ordinary cardiac surgeon and an ordinary cardiologist, acting with prudence and diligence.

[191] The trial judge's finding on the ter Neuzen point is not directly challenged in this Court. It is indirectly challenged in the sense I earlier mentioned: that the statements made by the trial judge in paragraph 111 of her reasons are said to indicate she had difficulty with her ultimate decision on the first ground of appeal. In light of the context I have outlined, I do not agree. It was not suggested in this Court the trial judge erred in her understanding of ter Neuzen. There was evidence which I will come to supporting her characterization of the tear in the aorta as "rare and exceptional".

[192] I return now to the text of my colleague's third observation in his paragraph [67]. There it is stated that risks of paraplegia, death and other overall risks are significantly reduced where prophylactic protection in the form of the bypass machine or a Gott shunt is employed where dense adhesions and friable aorta "ought" to be anticipated. He refers to the preference of three experts called by the appellants for the bypass machine and, as most noteworthy of all, the evidence of Dr. Trusler to the effect of the pump providing "that extra safety".

[193] The trial judge was fully cognizant of what the expert surgeons were saying. I have extracted the gist of her comments from the following paragraphs of her judgment:

Paragraph		
90	-	All expert evidence and literature confirm that the true extent of scarring and adhesions cannot be predicted and can only be determined during the operation. Their presence in Melanie's case should be anticipated as should the possibility that the aorta would be friable.
91	-	It is essential to consider and plan for the possibility Melanie's collaterals would be insufficient to perfuse her spinal cord during an extended period of cross-clamping.
92	-	The various factors to be considered in the repair of a recurrent recoarctation were summarized in an article adopted by the plaintiffs' experts.
93	-	Dr. Ashmore did not ignore the risk factors of unpredictable extent of scar tissue and adhesions and the sufficiency or otherwise of Melanie's collaterals and planned for these.
94-100	-	The evidence of the five surgeons who testified was canvassed by the trial judge who quoted Dr. Trusler's testimony under cross-examination as follows:

Q Sorry. Dr. Ashmore's evidence is that he would wait until cross-clamping to determine whether to apply a protective mechanism, whether by way of Gott shunt or cardiopulmonary bypass. Is that your understanding?

A Yes.

Q It's just a simple question. You have described, in the paragraph that you have read two or three times, the major danger of dissecting up to cross-clamping; is that fair?
A Yes.

Q And I'm respectfully suggesting to you that this decision to wait to cross-clamp leaves the patient unprotected during this period of major danger. That's all. Is that true?
A It's true, and that's the way we do it.

Q Well, let's talk about that. It's the way you do it, and your colleagues do it at the Toronto Sick Children's Hospital. Is that what you're saying?
A Yes, and the way Stark and Pacifico do it and the way Castaneda does it.

[194] The evidence of Dr. Trusler my colleague considers significant was given in his historical review of paediatric coarctation surgery with particular reference to the training cardiac surgeons receive.

[195] When the portion in question of his evidence is examined in the context of the long answer in which it occurs and the cross-examination to which the evidence extracted refers, it is clear that the experience gained in the surgical treatment in adult cardiac patients for which the heart pump machine is indicated does not translate in identical terms to the cardiac treatment of pediatric patients. The "extra safety" relates more to the subjective confidence of a surgeon trained in the adult cardiac field. Dr. Trusler's opinion was that nothing in Melanie's case indicated a need for the prophylactic application of either a heart pump machine or the Gott shunt.

[196] Dr. Trusler was of the view the prophylactic use of the Gott shunt was indicated only where there were "very dense adhesions" and the time Dr. Ashmore took to deal with these in Melanie's case indicated to Dr. Trusler that her adhesions did not fall into such a category.

[197] The trial judge summarized the plaintiffs' contentions in paragraph 75 of her reasons:

> The plaintiffs contend that the circumstances of Melanie's case were:
>
> (1) elective surgery on an otherwise asymptomatic 16 year old girl;
>
> (2) a third coarctation repair by the same surgeon who performed the previous two repairs;
>
> (3) the events of the second surgery to repair provided Dr. Ashmore with insight into the conditions he would face on the third

repair;

(4) the surgeon had reason to anticipate in the planning phase the risks that occurred during the surgery; and

(5) during the early stages of the operation, the opportunity existed for the surgeon to reassess his approach and surgical technique.

[198] She dealt with the evidence in respect of each of these matters and, over the next seven pages of her judgment, came to conclusions and findings. She then considered the standard of care applicable in these circumstances. In the nine pages of her judgment that followed she concluded the risk factors were not ignored. In paragraph 93 to which I have referred she made a finding not challenged in this Court.

> Notwithstanding the unpredictability of the extent and density of scar tissue and adhesions, and the sufficiency of Melanie's collateral circulation, as well as the possible friability of the aorta, it is plain from Dr. Ashmore's evidence that those risk factors were not ignored. Indeed, they were planned for, as evidenced by his intention to use a Gott shunt if the collateral circulation proved to be inadequate.

[199] The evidence established a number of operative techniques. As this is the subject of the principal ground of the majority judgment in the case at bar I will defer further comment on operative or surgical techniques until I came to the issue of informed consent.

[200] I have referred to the trial judge's reasons in some detail. I have done so in order to determine whether she misapprehended, misunderstood or overlooked evidence which would demonstrate within Toneguzzo and the associated authorities that she was plainly wrong in her judgment on the first ground of appeal. In my view, no such demonstration has been made out. In the result I am of the opinion my colleague's third observation is an indirect substitution of an appellate opinion for which no warrant in law exists.

4. The fourth observation

[201] My colleague's fourth observation is set out in paragraph [68] of his reasons. He there suggests the trial judge erred in referring to guarantees rather than reduction of risks. Reference was made to paragraphs 96 and 110 of her reasons.

[202] I am unable to agree. In paragraph 96 she says of Dr. Gillis's evidence that he conceded the use of the safety measures did not guarantee avoidance of paraplegia. This, again in context, means no more than there were risks inherent

in all prophylactic measures.

[203] It was for the trial judge to determine what these were and their relative significance.

[204] That assessment is contained in paragraph 110 where she says:

> Furthermore, I am unable to conclude that "the obvious and reasonable precautions" were themselves without risks, or that, if employed, they would have necessarily prevented Melanie's paraplegia.

[205] The words she placed in quotation marks are from Mr. Justice Sopinka's judgment in ter Neuzen at 220. The last clause echoes Coyne J.A. in Anderson v. Chasney, supra, where he said if "... a simple precaution, plainly capable of obviating danger which sometimes results in death was well known ...", the practitioner could not exonerate himself by showing others also neglected to take it. At 219-220 of ter Neuzen Sopinka J. quoted this with approval. There was evidence which supported the concluding finding stated in the above extract from paragraph 110 of Madam Justice Kirkpatrick's reasons.

[206] With the greatest respect to my colleague, I am of the view no basis has been established that supports appellate modification of the trial judge's dismissal of the first ground of appeal - negligence in the planning and conduct of the operation. In this circumstance I fear these observations are an impediment to the only issue properly before this Court: namely, informed consent. I am not overlooking the conclusion stated by my colleague in paragraph [69] of his reasons for judgment, and I will come to that in considering the substantive basis for his conclusion that the surgeon is liable in negligence on the consent issue.

III. THE SECOND ISSUE - INFORMED CONSENT

1. The mature minor and the 16 year-old patient

[207] An important question must be answered before determining if the operation in February, 1990 was performed with informed consent; that is: "who could have consented to the operation?"

[208] My colleagues have concluded that only Melanie could give such consent and that the role of her parents was that of advisors. In one sense, this is hypothetical as there is no evidence that Melanie and her parents differed in their actual consent. However, if my colleagues are correct the trial judge was precluded from taking into consideration, as she did, the role of the parents based on the relationship with Drs. Ashmore and Patterson that had existed since shortly after Melanie's birth.

[209] For this threshold question, I turn first to Part XII of Mr. Justice Lambert's judgment.

[210] I understand he finds:

a. At common law the consent of Melanie before she reached the age of 16 was effective as she had "... sufficient maturity, intelligence and capability of understanding" to make informed choices about the proposed medical treatment.

b. The consent of Melanie after she reached the age of 16 was effective by virtue of An Act to Amend the Infants Act, S.B.C. 1973, c. 43 which was in force when the operation was performed. (I will refer to this as the 1979 Act as at the time of the 1979 consolidation a change in numbering took place. In 1993 it was repealed and successor legislation took its place. Thereafter the looseleaf edition of the consolidated Infants Act contained the new s. 16.).

c. In both circumstances, and I quote here from paragraph [75] of my colleague's reasons:

> All rights in relation to giving or withholding consent will then be held entirely by the child. The role of the parent or guardian is as advisor and friend. There is no room for conflicting decisions between a young person who has achieved consenting capacity, on the one hand, and a parent or guardian, on the other.

[211] I am unable to agree the finding I have quoted states a result conforming to either the common law as it was in 1990 or to the statute law of the province then represented by the 1979 Act.

[212] It appears the plaintiffs sought to set aside the actual consent of Melanie and her parents when they alleged, amongst other particulars in the amended statement of claim, failure on the part of the surgeon ".... to advise the Plaintiffs of other less risky options available for the management of Melanie's medical condition". No issue arose in the trial court or in this Court over a possible exclusion of the consent of two of these plaintiffs until counsel provided us with written submissions in response to the questions posed by the Court at the end of argument. See paragraph [72] of Mr. Justice Lambert's reasons. It was only in the appellant's answer to the Court's second question that it was asserted for the first time that Melanie's consent alone was necessary and that of her parents was not. The respondent's answer to the second question asserted the finding of the trial judge on consent covered both Melanie and her parents.

[213] I turn to the situation at common law as it applied to Melanie and her parents prior to her 16th birthday in November, 1989.

a. Consent prior to Melanie's 16th birthday

[214] Who is to decide whether a 15 year old patient possesses "sufficient maturity, intelligence, and capability of understanding ..."? This is a question of fact. I think it is answered in Gillick v. West Norfolk and Wisbech Area Health

Authority, [1986] 1 A.C. 112 (H.L.) ("Gillick"). The issue in that case was whether the mother of teenaged daughters had the absolute right as a parent to be informed of and to veto medical advice or treatment of a contraceptive nature which need not be disclosed to the parents on the authority of a "Memorandum of Guidance" issued to the treating health authorities by a government department.

[215] It would appear the answer to the question is: the minor's medical advisor. Lord Fraser of Tullybelton had this to say in his speech at 174:

> There may well be other cases where the doctor feels that because the girl is under the influence of her sexual partner or for some other reason there is no realistic prospect of her abstaining from intercourse. If that is right it points strongly to the desirability of the doctor being entitled in some cases, in the girl's best interest, to give her contraceptive advice and treatment if necessary without the consent or even the knowledge of her parents. The only practicable course is to entrust the doctor with a discretion to act in accordance with his view of what is best in the interests of the girl who is his patient. He should, of course, always seek to persuade her to tell her parents that she is seeking contraceptive advice, and the nature of the advice that she receives. At least he should seek to persuade her to agree to the doctor's informing the parents. But there may well be cases, and I think there will be some cases, where the girl refuses either to tell the parents herself or to permit the doctor to do so and in such cases, the doctor will, in my opinion, be justified in proceeding without the parents' consent or even knowledge provided he is satisfied on the following matters: (1) that the girl (although under 16 years of age) will understand his advice; (2) that he cannot persuade her to inform her parents or to allow him to inform the parents that she is seeking contraceptive advice; (3) that she is very likely to begin or to continue having sexual intercourse with or without contraceptive treatment; (4) that unless she receives contraceptive advice or treatment her physical or mental health or both are likely to suffer; (5) that her best interests require him to give her contraceptive advice, treatment or both without the parental consent.
>
> That result ought not to be regarded as a licence for doctors to disregard the wishes of parents on this matter whenever they find it convenient to do so. Any doctor who behaves in such a way would be failing to discharge his professional responsibilities, and I would expect him to be disciplined by his own professional body accordingly.
>
> [Emphasis added]

[216] At 188 Lord Scarman came to the same conclusion:

> In the light of the foregoing I would hold that as a matter of law the parental right to determine whether or not their minor child below the age of 16 will have medical treatment terminates if and when the child achieves a sufficient understanding and intelligence to enable him or her to understand fully what is proposed. It will be a question of fact whether a child seeking advice has sufficient understanding of what is involved to give a consent valid in law. Until the child achieves the capacity to consent, the parental right to make the decision continues save only in exceptional circumstances. Emergency, parental neglect, abandonment of the child, or inability to find the parent are examples of exceptional situations justifying the doctor proceeding to treat the child without parental knowledge and consent: but there will arise, no doubt, other exceptional situations in which it will be reasonable for the doctor to proceed without the parent's consent.
>
> ...
>
> It follows that a doctor will have to satisfy himself that she is able to appraise these factors before he can safely proceed upon the basis that she has at law capacity to consent to contraceptive treatment. And it further follows that ordinarily the proper course will be for him, as the guidance lays down, first to seek to persuade the girl to bring her parents into consultation, and if she refuses, not to prescribe contraceptive treatment unless he is satisfied that her circumstances are such that he ought to proceed without parental knowledge and consent.
>
> [Emphasis added]

[217] In her review of the common law Madam Justice Huddart, then sitting in the Supreme Court of British Columbia, summarized her conclusion in Ney v. Canada (1993), 102 D.L.R. (4th) 136 (B.C.S.C.) in these words at 147:

> In summary, at common law a child is capable of consenting to medical treatment if he or she has sufficient intelligence and maturity to fully appreciate the nature and consequences of a medical procedure to be performed for his or her benefit. It appears that the medical practitioner is to make this determination. If the child is incapable of meeting this test then the parents' consent will be required for treatment. It is not clear whether parental control yields to the child'[sic] independence or whether there are concurrent powers of consent. But it is clear that the parents may not veto treatment to which a capable child consents, and that neither child nor parents can require a medical practitioner to treat. Apart from s. 16, this rule is modified

only to the extent that the decision of a child or parents may be overridden under the provisions of the Family and Child Service Act, S.B.C. 1980, c. 11, or by the court acting under its parens patriae jurisdiction.

[Emphasis added]

[218] At issue before her was the validity of the legislation which replaced the 1979 Act.

[219] For present purposes I would agree with my colleague's description of Melanie. I do not doubt she was mature, intelligent, interested in her health, and capable of understanding what affected her health when she was admitted to the B.C. Children's Hospital in 1989 for the third operation. Such an assessment is obviously a question of fact and I all the more accept my colleague's evaluation of Melanie as relevant because I think it coincides with how Dr. Ashmore and her medical team saw her.

[220] It will be seen from what I have quoted from Gillick that with the authority to decide whether a minor of the age of 15 is sufficiently mature goes a professional responsibility to act in the child's best interests. Under Gillick this includes consulting with and obtaining the parents' consent in all but clearly defined circumstances, such as abandonment, unavailability, emergency. Such circumstances are absent here. Lord Fraser regarded a failure to disregard the wishes of the parents in the absence of such circumstances as professional misconduct.

[221] In my view the common law in this province in 1989, assuming for the moment it was not codified by the 1979 Act, required an evaluation by the medical advisors who would be professionally bound to consult the parents and to respect their wishes unless some very good reason existed. That, I think, is the effect of Gillick.

[222] Drs. Patterson and Ashmore, as prudent and reasonable practitioners, would consult the parents and Melanie and, unless there was circumstance of the kind envisioned by Lords Fraser and Scarman, would be unlikely to proceed in the absence of the consent of all three. The trial judge looked at the whole course of the relationship between the Van Mol family and their medical advisors in order to decide whether there was adequate risk disclosure to support the actual consent of Melanie and her parents. In my view, she was correct in doing so.

[223] The case of Walker v. Region 2 Hospital Corp. (1994), 116 D.L.R. (4th) 477 (N.B.C.A.) was referred to by my colleague. In that unusual case the 15 year old patient stipulated in his consent an objection to the use of transfused blood products. His medical advisors agreed he was mature and aware of the possibly fatal consequences. They proposed a course of treatment that would not involve transfused blood products.

The 15 year old consented to this as did his parents who shared his beliefs. Nevertheless, the hospital and the principal specialist felt it desirable to apply under the "Medical Consent of Minors Act" of New Brunswick, which the Chief Justice of New Brunswick said at 487 codified the common law. The order sought was

a. that the minor be declared mature, capable of consenting to blood transfusions and dispensing with the consent of the parents;
b. alternatively, that the applicants be allowed to not administer transfused blood products to the minor unless he consents in which event the applicants desire an order allowing them to administer blood if necessary, notwithstanding the wishes of the parents.

[224] The judge to whom the application was made declared, in the exercise of the court's parens patriae jurisdiction, the patient a ward of the court. On appeal this order was set aside. The Chief Justice of New Brunswick, speaking for the majority, concluded the application was unnecessary as the findings of the physicians and the consent of the parents confirmed his maturity. It is apparent the purpose of the order sought was to avoid the need to obtain the parents' consent if the minor decided in the future, notwithstanding his present beliefs, to accept transfused blood products.

[225] It will be seen, however, no actual issue arose as between parents and child, and in my view, the relevance of this case is principally in respect of the interpretation of the 1979 Act.

b. Consent after Melanie's 16th birthday

[226] This brings me to the statutory regime in place at the time Melanie attained the age of 16, some three months prior to the operation in February, 1990. The 1979 Act which, as I have said, was enacted in 1973, differed significantly from the English legislation discussed in Gillick.

[227] As a matter of convenience I set out the two pieces of legislation:

The 1979 Act

PART 2

Consent of infant to medical treatment

16.(1) Subject to subsection (4), the consent of an infant who has attained 16 years of age to surgical, medical, mental or dental treatment which, in the absence of consent, would constitute a trespass to his person, shall be as effective as it would be if he were of full age.

(2) Where an infant has, by virtue of this section, given his consent to any treatment it is not necessary to obtain a consent from his parent or guardian.
(3) In this section "surgical, medical or mental treatment" means any procedure undertaken by a medical practitioner, and "dental treatment" means any procedure undertaken by a dentist who is a member of the College of Dental Surgeons of British Columbia, for the purpose of diagnosis or treatment, including in particular the administration of an anaesthetic, or any other procedure ancillary to the diagnosis or treatment.
(4) Nothing in this section makes a consent effective unless
(a) a reasonable effort has first been made by the medical practitioner or the dentist to obtain the consent of the parent or guardian of the infant; or
(b) a written opinion from one other medical practitioner or dentist is obtained confirming that the surgical, medical, mental or dental treatment and the procedure to be undertaken is in the best interest of the continued health and well being of the infant.
(5) This section does not make ineffective a consent which would have been effective if the section had not been enacted.
(6) A medical practitioner or dentist who treats an infant under subsections (1) and (2) without consent from his parent or guardian may provide the parent or guardian of the infant with the information the person treating the infant considers advisable.

[Emphasis added] S. 8 of the Family Law Reform Act of 1969, U.K. Stat. 1969, c. 46

8.-(1) The consent of a minor who has attained the age of sixteen years to any surgical, medical or dental treatment which, in the absence of consent, would constitute a trespass to his person, shall be as effective as it would be if he were of full age; and where a minor has by virtue of this section given an effective consent to any treatment it shall not be necessary to obtain any consent for it from his parent or guardian.

(2) In this section "surgical, medical or dental treatment" includes any procedure undertaken for the purposes of diagnosis, and this section applies to any procedure (including, in particular, the administration of an anaesthetic) which is ancillary to any treatment as it applies to that treatment.

(3) Nothing in this section shall be construed as making ineffective any consent which would have been effective if this section had not been enacted.

[228] It will be seen that s-ss. (4) and (6) of the 1979 Act are without counterpart in the English legislation. The consent of the 16 year old infant is made wholly subject to s-s. (4) which requires the treating physician to proceed under paragraphs (a) or (b) before he or she may treat the consent of the 16 year old as valid. In the event of a dispute, it would be for a court of law to determine whether the efforts made under (a) were reasonable and whether an opinion obtained under (b) conformed to the statutory requirements set out in that paragraph.

[229] In Gillick Lord Scarman said at 182 of the English legislation:

> I cannot accept the submission made on Mrs. Gillick's behalf that subsection (1) necessarily implies that prior to its enactment the consent of a minor to medical treatment could not be effective in law. Subsection (3) leaves open the question whether the consent of a minor under 16 could be an effective consent. Like my noble and learned friend, Lord Fraser of Tullybelton, I read the section as clarifying the law without conveying any indication as to what the law was before it was enacted. So far as minors under 16 are concerned, the law today is as it was before the enactment of the section.
>
> [Emphasis added]

[230] Unlike the English act, the 1979 Act appears to have been intended to change the law. It is similar in its requirements to the New Brunswick legislation referred to in Walker v. Region 2 Hospital Corp., supra.

[231] However it is viewed, the 1979 Act was in force when the third operation was performed. Under it the treating surgeon was required to take one or both of the steps specified in paragraphs (a) and (b) of s-s. (4) if, in the absence of an emergency or a court order he or she intended to rely solely on the consent of a minor child who had attained the age of 16. In view of the lack of finality in these two courses, a prudent surgeon would take advantage of s-s. (5) and obtain the matching consent of the parents rather than risk a challenge to the adequacy of anything done in purported compliance with paragraphs (a) or (b) of s-s. (4). Conceptionally, this is what was done in the case at bar.

2. Alternative methods or surgical techniques

[232] I turn now to the substantive basis advanced for setting aside the trial judge's finding that the required consents were given.

[233] These are set out in Mr. Justice Lambert's reasons in paragraph [69] of Part XI - Conduct of the Operation, and in paragraph [95] of Part XIV - Informed Consent: Surgical Alternatives.

[234] What is stated in paragraph [69] are two conclusions derived from my colleague's observations to which I have already referred. These conclusions are said to be necessary to the process of reasoning on the second head of claim.

[235] The first conclusion is that there are three principal alternative methods of carrying out the operation performed in February, 1990: one, the method adopted by the surgeon which does not use any prophylactic protection but has the Gott shunt available if the collateral flow is insufficient; two, to use the Gott shunt prophylactically before cross-clamping; and, three, to use the cardiopulmonary bypass machine, either hooked up or on standby.

[236] In fact, the surgical procedures or alternative methods of carrying out the operation are not limited to the three mentioned. Nor do these three exhaust the surgical options available to a surgeon in a third recoarctation operation when repairs are needed. What is in issue here are those available to the surgeon "from skin to aorta" and it is only to these that I will now refer as my colleague does not suggest the alternative repair techniques are matters the surgeon must discuss with the patient in order to obtain an informed consent.

[237] It is further asserted in paragraph [69] as a conclusion that for each of these three alternatives the risks are describable and, in some respects assessable, and that these should be discussed with the patient with consenting capacity. Moreover, it is said there is nothing in this conclusion contrary to the trial judge's reasons as this conclusion was unnecessary to her finding on the first ground of claim.

[238] In the concluding sentence in paragraph [95] of Part XIV my colleague states:

> But the essential question is whether the three principal surgical alternatives should have been discussed with the person capable of giving informed consent.

I would answer this question in the negative.

[239] I will first refer briefly to the evidence at the trial to determine whether the trial judge misunderstood, misapprehended or overlooked the evidence which could affect

her findings expressed in the following passages in her judgment:

104 The various views expressed by all the surgeons, and which is reflected in the medical literature, make it plain that the decision is not simply one of shunt or no shunt; or patch aortaplasty, or jump graft, or interpositional graft. The evidence is clear that every option available to the surgeon (be it an operative approach or a mechanism for spinal cord protection) carries with it positive and negative features. The mere fact that so many procedures are available and are considered appropriate in the repair of recoarctations is perhaps the best proof that there is no one accepted school of medical thought as to the best operative approach.

105 Based upon all of the evidence, I conclude that there was, in 1990, no one acceptable operative procedure nor one accepted method of ensuring protection of the spinal cord in the repair of a third coarctation. Indeed, from the review of the various expert options and the medical literature discussed by the doctors at trial, it is evident that there are several acceptable operative procedures and acceptable approaches for the protection of the spinal cord. Further, it is clear that Dr. Ashmore's operative approach was one of several acceptable approaches consistent with an established body of medical opinion.

[240] I will then consider whether the authorities binding on this Court requires the question of surgical techniques to be disclosed to the extent stated by my colleague.

a. The Evidence at Trial

[241] The evidence disclosed at least four alternative surgical techniques with variants and combinations which were canvassed at length with the seven cardiovascular surgeons who testified. Those called by the plaintiffs supported the use of the heart pump or other techniques such as a jump graft, a technique which avoided dissection in an area of dense adhesions. The defendant surgeon and the two surgeons called on behalf of the defendants supported the surgical plan adopted by Dr. Ashmore. Dr. LeBlanc preferred the heart pump but he characterized the Gott shunt as appropriate. The narrow point was whether the surgeon was negligent in his failure to use the Gott shunt prophylactically.

[242] I quote from paragraph 2 of Dr. Miyagishima's report on page 3, confirmed in his testimony at trial:

2. And when it is determined, through a left thoracotomy and with minimal dissection, that the adhesions are severe and the aorta appears friable, then one would insert a bypass device, either in arterial - arterial shunt (Gott

shunt), or cardiopulmonary bypass before any extensive dissection is undertaken.

The points that are common to the operation performed by Dr. Ashmore are: the approach (left thoracotomy); the appraisal of the adhesions and the degree of friability of the aorta after it is exposed to visual examination; and finally, the interchangeability of the Gott shunt and the heart pump as anticipatory support.

[243] The difference between what he describes and what Dr. Ashmore planned was this: the latter intended to determine the adequacy of the collateral blood vessels to provide blood to the spinal cord after he had exposed the aorta sufficiently to clamp it. If there was doubt after measuring the blood pressures the Gott shunt would be inserted. This would necessitate further dissection.

[:\C Dr. Ashmore's proposed use of the Gott shunt instead of the heart pump reflected his assessment of the risks of the latter. His decision to measure the adequacy of the collaterals before deciding on the use of the Gott shunt reflected a variety of factors.

[245] Dr. Ashmore was on the stand for the better part of five days. He was cross-examined on every technique open to a surgeon who undertakes the repair of the aorta. It would be tedious to review his evidence in detail. I will refer only to the reason he gave for not using the heart pump in Melanie's case.

[246] The use of the heart pump requires the administration of the drug heparin as an anticoagulant to obviate the risk of blood clots. Dr. Ashmore, who had used the heart pump and was familiar with its operation, concluded that in his judgment the risk of greater bleeding as a result of anti-coagulation was not one he accepted. In response to a series of questions arising out of his discovery evidence related to Melanie's operation he said:

. . . If you look at the material on spinal cord protection, Nijaffi's (phonetic) work and many others, Crawford's and others, in every case when the procedure was carried out with a heart/lung machine, the bleeding was substantially greater than if they either used a non-heparinized shunt or if they used no protection at all. In the context of this question 692, I'm saying the reason that I did not propose to use a heart/lung machine was that I did not wish to heparinize the patient.

[Emphasis added]

[247] The trial judge had abundant evidence from pediatric and adult cardiovascular surgeons of the surgical techniques available in 1990. It was for her as the trial judge to decide whether the surgeon had breached his duty of care in adopting the surgical technique he used. She instructed herself in the

law in the following paragraph of her judgment:
106 In Belknap v. Meakes (1989), 64 D.l.R. (4th) 452 (B.C.C.A.), Seaton J.A. held, at p. 474:

> McNair J. in Bolam v. Friern Hospital Management Committee, [1957] 2 All E.R. 118 at p. 122 (Q.B.D.), put the issue to the jury in a way that has been accepted as correct:
>
> > A doctor is not guilty of negligence if he has acted in accordance with a practice accepted as proper by a responsible body of medical men skilled in that particular art . . . Putting it the other way round, a doctor is not negligent, if he is acting in accordance with such a practice, merely because there is a body of opinion that takes a contrary view.

She concluded the surgeon's conduct fell within the standard stated by Mr. Justice Seaton.

[248] I have already alluded to the plaintiffs' contention at trial that the generally accepted practice was negligent. What the trial judge said in part in paragraph 110 after considering the ter Neuzen exception is also relevant here:

> Considering the very extensive and complex medical evidence heard in this case, I conclude that Melanie's condition involved difficult and uncertain questions of medical treatment, as evidenced by the conflicting schools of thought on the best approach to repair a recoarctation and to ensure adequate spinal cord perfusion. . . . But if one assesses the circumstances of Melanie's extensive medical history, Dr. Ashmore's intimate knowledge of her medical circumstances, the operative site as it was known in January, 1979 and as it presented in February 1990, the risks and benefits of the various approaches, and Dr. Ashmore's skill and knowledge as a surgeon, the decision to employ spinal protection prophylactically is not, as required by ter Nuzen, "obvious nor readily apparent." Furthermore, I am unable to conclude that "the obvious and reasonable precautions" were themselves without risks, or that, if employed, they would have necessarily prevented Melanie's paraplegia.

[249] In my view, these findings are supported by evidence and display no error or oversight. Under Toneguzzo, an intermediate appellate court is not permitted, directly or indirectly, to come to a contrary conclusion.

b. The Three Alternatives - A question of law?

[250] I come now to my second comment.

[251] I am not persuaded the law in Canada, whether in 1990 or today, requires a surgeon to volunteer a comparative assessment of alternative surgical techniques in the knowledge that if he or she is wrong in that assessment the consent given may be vitiated.

[252] I have referred to the judgment of Mr. Justice Sopinka in ter Neuzen. At 216 he quoted with approval the judgment of L'Heureux-DubÇ J. in Lapointe v. Chevrette, [1992] 1 S.C.R. 351, a case under the Civil Code, at 363-64:

> Given the number of available methods of treatment from which medical professionals must at times choose, and the distinction between error and fault, a doctor will not be found liable if the diagnosis and treatment given to a patient correspond to those recognized by medical science at the time, even in the fact of competing theories. As expressed more eloquently by AndrÇ Nadeau in "La responsabilitÇ mÇdicale" (1946), 6 R. du B. 153, at p. 155:
>
> > [Translation] "The courts do not have jurisdiction to settle scientific disputes or to choose among divergent opinions of physicians on certain subjects. They may only make a finding of fault where a violation of universally accepted rules of medicine has occurred. The courts should not involve themselves in controversial questions of assessment having to do with diagnosis or the treatment of preference."
> >
> > [Emphasis of Sopinka J.]

[253] The selection of a particular surgical technique as part of a surgeon's plan of approach from incision to exposure of the aorta reflects as well as an evaluation of pre-operative information the knowledge that actual conditions may require divergence from the plan. Where a number of techniques exist, the surgeon's experience and skill will be a rational factor. With all respect to the contrary view, it seems to me the conclusion stated by my colleague in paragraph [69] of his reasons, requiring voluntary disclosure of a risk assessment of surgical techniques, takes the law of risk disclosure beyond its existing limits into the realm of the surgeon's judgment of what is perceived as the operation proceeds from anticipation to reality. See: Wilson v. Swanson, [1956] S.C.R. 804 at 811.

[254] Moreover, it does not appear to be a conclusion shared by Dr. Miyagishima. In cross-examination he was questioned about the risk of bleeding with heparin. (For the background to this see paragraph [246] of these reasons):

> Q You said, Doctor, in your evidence last week that you would accept the risk of bleeding with heparin, and I was interested when you went through your hypothetical discussion of

patients. You apparently don't tell patients that you're accepting that risk; is that so?

A No. I very rarely tell the patient that I'm going to use heparin and give them all the pros and cons of heparin, no. I do talk about the complications of surgery and bleeding is one of the complications, yes.

Q But you don't talk about the increased risks of bleeding with heparin?

A I don't normally, no.

[255] And in evidence that concisely fits with the trial judge's finding he said this in his cross-examination:

Q Let's go over the page, Doctor, to page 4. It carries over from the preceding page but you talk about an interposition graft or the jump graft and about the benefits and safety of bypass. What you're doing there, Doctor, is trading one set of risks for another based on your clinical assessment of which set outweighs the other?

A About using the type of grafts?

Q Yes.

A Not necessarily. After the aorta is controlled and I have the patient on bypass, then I will choose the best approach that I can, and there are times when I feel that one cannot put an interposition graft in safely, then I will use a jump graft.

Q But you do that, Doctor, recognizing, do you not, that you may be trading one set of risks for another?

A Oh, yes, yes, I agree.

[256] I come now to the question of whether the surgeon was negligent in failing to discuss with Melanie the surgical technique he had selected for the "skin to aorta" phase of the third operation.

3. Informed Consent - Reibl v. Hughes

[257] It will be seen from the portion of the trial judge's paragraph 110 I have quoted that she arrived at her conclusion on the first ground of appeal after taking into account:

" Melanie's extensive history;

" Dr. Ashmore's intimate knowledge of her medical circumstances;

" the operative site as it was known in January, 1979 and as it presented in February, 1990;

" the risks and benefits of the various approaches;

" Dr. Ashmore's skill and knowledge as a surgeon.

[258] All are agreed the standard to be applied in assessing the issue of informed consent is found in Reibl, supra.

[259] In that case the plaintiff, then 44 years old, suffered a massive stroke after an operation for the removal of an occlusion in the left internal carotid artery. The plaintiff had formally consented to the operation. He alleged his consent was not an "informed consent". He succeeded in the trial court. The Ontario Court of Appeal ordered a new trial. In the Supreme Court of Canada the judgment at trial was restored. At 884 the late Chief Justice of Canada speaking for the Court said:

> It is now undoubted that the relationship between surgeon and patient gives rise to a duty of the surgeon to make disclosure to the patient of what I would call all material risks attending the surgery which is recommended. The scope of the duty of disclosure was considered in Hopp v. Lepp . . . where it was generalized as follows:
>
> > In summary, the decided cases appear to indicate that, in obtaining the consent of a patient for the performance upon him of a surgical operation, a surgeon, generally, should answer any specific questions posed by the patient as to the risks involved and should, without being questioned, disclose to him the nature of the proposed operation, its gravity, any material risks and any special or unusual risks attendant upon the performance of the operation. However, having said that, it should be added that the scope of the duty of disclosure and whether or not it has been breached are matters which must be decided in relation to the circumstances of each particular case.

The Court in Hopp v. Lepp also pointed out that even if a certain risk is a mere possibility which ordinarily need not be disclosed, yet if its occurrence carries serious consequences, as for example, paralysis or even death, it should be regarded as a material risk requiring disclosure.

[260] In the Supreme Court of Canada the standard of disclosure apparently adopted by the Ontario Court of Appeal, namely, "the manner in which the nature and degree of risk is explained to a particular patient is better left to the judgment of the doctor in dealing with the man before him", was disapproved as handing over to the medical profession the entire question of the scope of the duty of disclosure. While expert medical evidence is relevant to findings as to the risks that resided in or would be a result of the recommended surgery, that is not determinative of the question. At 894 the late Chief Justice said:

> The issue under consideration is a different issue

from that involved where the question is whether the doctor carried out his professional activities by applicable professional standards. What is under consideration here is the patient's right to know what risks are involved in undergoing or foregoing certain surgery or other treatment.

The materiality of non-disclosure of certain risks to an informed decision is a matter for the trier of fact, a matter on which there would, in all likelihood, be medical evidence but also other evidence, including evidence from the patient or from members of his family.

[Emphasis added]

[261] In discussing a wholly objective standard this was said at 899 of Reibl:

The adoption of an objective standard does not mean that the issue of causation is completely in the hands of the surgeon. Merely because medical evidence establishes the reasonableness of a recommended operation does not mean that a reasonable person in the patient's position would necessarily agree to it, if proper disclosure had been made of the risks attendant upon it, balanced by those against it. The patient's particular situation and the degree to which the risks of surgery or no surgery are balanced would reduce the force, on an objective appraisal, of the surgeon's recommendation. Admittedly, if the risk of foregoing the surgery would be considerably graver to a patient than the risks attendant upon it, the objective standard would favour exoneration of the surgeon who has not made the required disclosure. Since liability rests only in negligence, in a failure to disclose material risks, the issue of causation would be in the patient's hands on a subjective test, and would, if his evidence was accepted, result inevitably in liability unless, of course, there was a finding that there was no breach of the duty of disclosure. In my view, therefore the objective standard is the preferable one on the issue of causation.

In saying that the test is based on the decision that a reasonable person in the patient's position would have made, I should make it clear that the patient's particular concerns must also be reasonably based; otherwise, there would be more subjectivity than would be warranted under an objective test. Thus, for example, fears which are not related to the material risks which should have been but were not disclosed would not be causative factors. However, economic considerations could reasonably go to causation where, for example, the loss of an eye as a result of non-disclosure of a material risk brings about the loss of a job for which good eyesight is required. In short, although account must be taken

of a patient's particular position, a position which will vary with the patient, it must be objectively assessed in terms of reasonableness.

[Emphasis added]

[262] There followed in Reibl an extensive review of the evidence of the patient himself, of the patient's wife, and of the medical experts called on each side.

[263] The Court concluded there had not been sufficient disclosure of the risk of a stroke and at 927 it was stated:

I do not see in the reasons of the majority of the Court of Appeal any evidentiary basis for challenging the findings of the trial judge on the defendant's breach of the duty of disclosure. Of course, the medical evidence was relevant to what that duty entailed but, that said, it was for the trier of fact to determine the scope of the duty and to decide whether there had been a breach of the duty entailed but, that said, it was for the trier of fact to determine the scope of the duty and to decide whether there had been a breach of the duty. As I have already said, the so-called statistical data used by the trial judge did not affect the grounds upon which he made his critical findings. The Court of Appeal held, however, that the trial judge did not examine the issue of causation with the necessary care that this issue required. He did not ignore it, even if he might have gone into it at greater length.

[Emphasis added]

[264] Earlier it was said at 926:
This was certainly a case in which a trial judge, here an experienced judge, was in a better position than an appellate court or this Court to determine what evidence to accept and what conclusions to draw from it.

[265] In my view the law of Canada where the issue is whether the consent given was informed is as set out in Reibl. As to the scope of the duty to be disclosed, that was for the trial judge to determine, as was said at 928:
Of course, the medical evidence was relevant to what that duty entailed but, that said, it was for the trier of fact to determine the scope of the duty and to decide whether there had been a breach of the duty.

Thereafter, if the validity of the actual consent is denied, the trial judge may be required, upon an examination of the relevant evidence, to apply the modified objective test to determine whether a reasonable person, knowing all material risks, would nevertheless have consented to the operation.

[266] In my view Reibl required the trier of fact to take into account the circumstances of Melanie's extensive history, the surgeon's intimate knowledge of the medical circumstances, the operative site as it was in January, 1979 (the second operation) and as it presented in February, 1990 and the surgeon's skill and knowledge in order:

> . . . to determine the scope of the duty to disclose material risks and to decide whether there had been a breach of that duty.

[267] The reference to "material risks" in that quotation is explained earlier in Hopp v. Lepp, supra, at 209:

> The case law on the question of informed consent or the duty of disclosure has exhibited a variety of classifications of risks involved in proposed surgery or therapy. Probable risks, which must be disclosed, have been contrasted with mere possibilities (as, for example, risks involved in any operation), but this dichotomy cannot be absolute because it ought to take note of whether a risk is or is not quite remote, and here the gravity of the consequences, if a risk should materialize, must be brought into account; for example, the risk of death, even if a mere possibility, as contrasted with some residual stiffness of a member of the body. A second classification, expressed in American cases and American writings, is that of material and immaterial risks. Under this classification possible risks whose consequences would be grave could well be regarded as material. Materiality connotes an objective test, according to what would reasonably be regarded as influencing a patient's consent.
>
> [Emphasis added]

[268] In my view the trial judge's finding on the issue of disclosure of material risks conformed to the law laid down in Reibl. The unusual feature in the case at bar is the assumption by this Court of a responsibility of the trial court on the ground the trial judge failed to give effect to a view of the law never pleaded nor argued before her.

[269] I have earlier indicated why I cannot agree that either the common law or the statutory regime in force in 1990 excludes consideration of the totality of the factors alluded to in Reibl. Melanie's circumstances did not commence with her admission to the B.C. Children's Hospital in 1989 nor is the validity of her actual consent to be determined by relegating her parents to the largely passive role of advisors.

[270] Unlike the brief relationship in Reibl between the 44 year old patient and the specialist surgeon to whom he was referred and saw for the first twelve days before the operation, the relationships in question here extend back to Melanie's birth.

[271] She was born with a constriction of the aorta - a

coarctation. In some 18 of the 65 pages of her judgment the trial judge reviewed Melanie's medical history and her relationship with her medical advisers. Of this history she said:

59 This rather lengthy review of Melanie's medical history up to the date of the surgery which is the focus of this action is necessary for several reasons. First, it demonstrates the seriousness and relative intractability of Melanie's condition. Second, it shows the long and active involvement of Dr. Patterson and Dr. Ashmore in Melanie's care. Third, it reveals, in necessarily superficial detail, the numerous concerns of the various physicians involved in Melanie's care as well as the concerns of Melanie and her parents.

[272] The whole of this review deserves to be read, as does the careful judgment of which it is a part. An obvious feature is the continuing relationship of the cardiologist, Dr. Patterson, and the surgeon, Dr. Ashmore, with the Van Mols. With the former, this relationship commenced when Melanie was 14 days old.

[273] Dr. Patterson conducted a cardiac catheterization which confirmed the presence of a coarctation and the ultimate need for corrective surgery. His evidence of the early years is important as he was in many respects the professional link between those who provided care to Melanie and the Van Mol family.

[274] In his paragraph [121] my colleague sets out from Dr. Ashmore's evidence in chief his recollection of his discussions with Melanie and the risks and benefits of the third operation. This is not the only evidence on this subject and I will refer later to what Dr. Ashmore said in his cross-examination.

[275] Nor is reference made to Dr. Patterson's evidence of his risk discussions. Melanie was born in Prince Rupert on 8 November 1973. She was admitted to hospital there on 18 November and two days later transferred to the Terrace Hospital for examination by a pediatrician. A coarctation was suspected and the parents were referred to Dr. Patterson as a cardiologist specializing in pediatric cases. Melanie was transferred to the Vancouver General Hospital and Dr. Patterson confirmed the presence of a coarctation. His early prognosis was:

Q And what was your prognosis for this child as of November 22nd, 1973?

A We felt if she got over her acute decompensation with medical therapy that she do well enough to have her coarctation repair deferred and there was the prognosis -- the immediate prognosis was quite good. The long term prognosis was also quite good but there was a concern that having presented so early with symptoms of coarctation that we were in for a fairly unclear, long-term

outcome.

Q Did you have any expectation at that stage whether surgery would be required?

A We knew surgery would be required. It was just a question of when.

Q Why not do surgery right then?

A The reason to avoid surgery at that point is that some children with coarctation may stabilize and develop collaterals and grow with medical support such that the high risk period of repair, which we usually identify at that point as within the first two or three months by being a newborn baby, the surgical encroachment, if you will, the stress of surgery was often -- could result in serious complications and sometimes death. So, our aim then was always to try and postpone coarctation repair certainly beyond three months and if possible beyond a year based on the results of surgery in the newborn which were less than spectacular.

[276] The recommended surgery was performed by Dr. Ashmore on 3 December 1975 when Melanie was in her third year. Dr. Patterson was asked in his examination in chief what he would have said to her parents. His reply follows:
I would have indicated the type of procedure that would need to be carried out to relieve the narrowing, that it would be closed heart surgery, it would be done through the left chest, that there might be some bleeding on the way in but there usually was not a great deal of technical difficulty with the first coarctation but how the surgery dealt with the area of narrowing would be something that would be decided by the surgeon either prior to the procedure or often in the actual operating room since that was the commonest way -- they did not often know what kind of approach would be taken to repair a coarctation until the child got back from the operating room. They might do a graft, resect the area of narrowing or they might use some other manoeuvre to relieve it. So, this was something that the surgeon would go into more detail how they might deal with it but it may not be well-known until actually after the operation.

People usually want to know how long it will take and we tell them it will take two to three hours by the time everybody is organized but it is not a long operation and that the danger is with bleeding and sometimes the possibility of a stroke and clotting of the coarctation in the immediate post-operative period were the sort of complications.

[277] Dr. Patterson performed an angioplasty in July, 1987. This procedure, a balloon dilation of the aorta, may be performed by a cardiologist. He testified he would have advised the Van Mols of the risks and benefits of this procedure and why a surgical team, headed by Dr. Ashmore, would be standing by in case any of the risks eventuated.

[278] I digress at this point to note Melanie's two surgeries which were unconnected with her aortic condition. One was a procedure to relieve deafness in one ear. The other involved the bladder. Both were performed by specialists. Mrs. Van Mol had a fair recall of what was to be done. Although there were risks she had no recollection of any risk discussion with either surgeon. It is difficult to conceive how responsible surgeons could undertake these procedures, one of which was done under general anaesthetic, without the informed consent of Mrs. Van Mol who was the parent responsible for the children's health. That, however, was her evidence. It appears both these operations took place after the second heart operation in 1975 and the angioplasty in 1987.

00\C9 Nor did Melanie recall any risk discussion prior to the third recoarctation operation. She maintained there was no such discussion and that had she been made aware of the risks she would have left the hospital. Her only recollection of Dr. Ashmore before the third operation was hearing him calm her father who was upset over the latest delay in the operation. She was fearful of being murdered, an idea she termed silly at the time of the trial but a real fear at the time she consulted the family doctor, Dr. Burnside, in Kamloops in April 1989. The latter's chart indicates that on April 1989 Dr. Patterson's letter recommending the third operation was discussed and on 11 April Melanie was "`worrying' re death". Melanie accepted the risk of dying but denied knowledge of this risk from any of Drs. Patterson, Ashmore and LeBlanc.

[280] I do not propose reviewing the evidence of the Van Mols. It is enough at this point to say the trial judge was required to undertake what is arguably the most difficult adjudicative task of all - deciding which of two conflicting versions advanced by and on behalf of honest people is to be accepted as that most closely approximating what in fact took place.

[281] Her finding is set out in the following paragraph:

> 130 It is exceedingly difficult to determine whether the appropriate risk discussion took place. Melanie and her parents obviously believe that no such discussion took place. Dr. Ashmore's evidence as to his recollection of discussion of risk and as to his usual practice was candid and credible. There are none of the markers of dishonesty or deception in any of their testimony upon which a finding is easily made. However, considering the evidence as a whole, I conclude that, on a balance of probabilities, Dr. Ashmore had the appropriate risk discussion with the Van Mols.

[282] This is not a finding based on deciding that one party is not telling the truth and the other is. It is a finding that upon all the evidence it is more probable than not that the version espoused by the doctors is what happened. Such a finding cannot be set aside by an appellate court unless there is shown to be error that can be characterized as "palpable and overriding". This phrase has become hackneyed but it is nonetheless declaratory of the law. I refer to the observation of Mr. Justice Esson of this Court in Menzies v. Harlos (1989), 37 B.C.L.R. (2d) 249 at 252:

> This may be an appropriate point at which to say something about the burden which the appellant had to discharge on this appeal. The issues were almost entirely factual. It therefore could not be enough to satisfy us that there had been error by the trial judge - it was necessary to demonstrate that his decision was affected by palpable and overriding error. Those strong words, sometimes called the "Kathy K. rule", have been repeated so often in recent years that they may have tended to lose their impact. But, as we have been reminded many times by the Supreme Court of Canada, they establish a test which cannot often be met, one of which sometimes requires appellate judges to dismiss an appeal notwithstanding their own view of the "rightness" of the decision, and which forbids them from retrying the case.

[283] Earlier in these reasons I concluded that in 1990 there was no basis in law for denying Melanie's parents a part in consenting to the third operation. I also endeavoured to demonstrate that a consideration of Melanie's medical history and its relationship to Drs. Ashmore and Patterson was relevant.

[284] Dr. Miyagishima, in his evidence in chief, testified how he would have dealt with the question of risk disclosure if Melanie had been referred to him immediately before the third operation.

[285] He stated he would have seen her in the company of her parents. He would have recommended the third operation and he would have sought to persuade them the third operation should be undertaken immediately, although a delay of up to two years could be tolerated. He would explain he suspected the adhesions, the scarring would be denser and that her collateral circulation to the lower extremities may not be the same as in the first and second operation. He would say, based on these considerations, he would institute a support system using, for his part, a heart pump system. What he would do to achieve a repair would depend on what he found after he reached the aorta and clamped above and below the narrowing. He would not explain the technology of the bypass machine except to the extent of telling Melanie and her parents an incision would be made in her groin. Beyond that he would answer questions. He would not have discussed the risks associated with the use of the bypass machine or compare it with other support systems.

[286] He would explain why the third operation should be undergone, citing as one reason, the potential risk of creating an aneurysm at the repair site if bacteria got into the blood stream as a result of dental work. He said he would reassure the patient by stating this risk was extremely low.

[287] I have summarized his evidence in chief. Although not so stated I infer he would expect consent from the three persons.

[288] I have alluded to this evidence to illustrate that the trial judge had the benefit of a full discussion of surgical techniques and options available in the management of the third operation. Her conclusions reflected the evidence of how surgeons viewed the risks and benefits of these options. There was ample evidence supporting the trial judge's conclusion as stated in paragraph 104 of her reasons which I repeat here:

> The various views expressed by all the surgeons, and which is reflected in the medical literature, make it plain that the decision is not simply one of shunt or no shunt; or patch aortaplasty, or jump graft, or interpositional graft. The evidence is clear that every option available to the surgeon (be it an operative approach or a mechanism for spinal cord protection) carries with it positive and negative features. The mere fact that so many procedures are available and are considered appropriate in the repair of recoarctations is perhaps the best proof that there is no one accepted school of medical thought as to the best operative approach.

[289] The trial judge found that one risk Dr. Ashmore did not foresee was that in positioning the proximal clamp a tear in the aorta would occur. There was evidence this was a rare and unexpected occurrence. Dr. Trusler called it rare and exceptional. Dr. Miyagishima accepted Dr. Penkoske's statement that this was a technical problem, not due to negligence, that can occur whenever one is operating upon vascular structures.

[290] The evidence of what Dr. Ashmore did, in addition to his evidence in chief quoted by my colleague, can be summarized as follows:

a. He discussed with Melanie that basically what `we were going to do was what we did in the second operation - put another patch on the aorta to try to make it work permanently'. He felt sure he had talked to Melanie about Dr. Burnside's letter of 20 April 1989.

b. He made the parents know a Gott shunt would be available in the context of spinal cord damage, not using that name but saying `we had a device available to deal with the problems that might exist; to be implemented to protect the lower part of Melanie's body against the risks of diminished blood flow, only if necessary'.

c. He was sure he did refer to the risk of restenosis, the recurrence of the narrowing of the aorta, as he recalled Mr. Van Mol's questions on this subject.

d. In talking to Melanie alone the possibility of death was mentioned, not dwelt on, as she was aware, as were her parents, of the mortality involved. He said he was the source of this. He was not sure if he talked to Melanie alone about spinal cord damage, as he had with her parents.

It will be seen that there is no direct claim the surgeon discussed the surgical technique he planned to follow with Melanie alone other than by reference to the second operation.

[291] There was evidence, if accepted by the trial judge, that the appropriate risk discussions took place if all three plaintiffs are treated as one. In my view they should be. Since the trial judge's finding was based on the credibility of the witnesses directly concerned, I am of the view the record discloses no palpable and overriding error. There is one proviso: if the view of the majority is correct and a voluntary discussion of the comparative risks of the surgical options from skin to aorta is material is required, then it would seem clear the modified objective standard adopted in Reibl must be applied. This is in fact what the trial judge did in paragraph 131. In light of all the relevant evidence in the case at bar, I am in complete agreement with her analysis.

[292] I would add only one further comment. None of Dr. Ashmore's surgeries had resulted in paraplegia or mortality. This would have been a significant consideration for parents whose child was experiencing the irrational, but for her at the time, very real fear of murder.

IV. LARYNGEAL NERVE DAMAGE

[293] The conclusion reached by my colleague in Part XVIII of his reasons for judgment is that laryngeal nerve damage is a compensable head of damage in Melanie's claim against Dr. Ashmore. The premises of this conclusion are:

a. The damage occurred near where the tear in the aorta occurred. Whether done by Dr. Ashmore or Dr. LeBlanc in dissection cannot be determined.

b. The breach of duty on the part of Dr. Ashmore in failing to have a proper risk discussion with Melanie deprived her of the choice of having a by-pass machine and this was the cause in fact and law of her laryngeal nerve damage.

[294] In my view, it does not necessarily follow that if Dr. Ashmore had described the surgical techniques available Melanie (and her parents) would inevitably have opted to have a by-pass machine ready, given the risks perceived by Dr. Ashmore of heparinization.

[295] Dr. Miyagishima at p. 3 of his report said:

> In my opinion, the prudent approach to the surgery would be to drape the patient so that the left groin is exposed. Have a heart-lung machine ready in the operating theatre along with a perfusionist. Through a left thoracotomy, the degree of fibrosis, scarring, adhesion and friability of the aorta at the coarctation cite is carefully assessed. This assessment should be done before any extensive dissection takes place. If there is any question that the dissection will be hazardous, the femoral artery is exposed and isolated. The patient is heparinized and then `left atrial to femoral artery' or `femoral vein to femoral artery' cardiopulmonary bypass is instituted.
>
> [Emphasis added]

As I read this, if the visual inspection by the surgeon does not indicate dissection would be hazardous, the operation would proceed without putting the patient on by-pass.

[296] Furthermore, Dr. Miyagishima's remark on the next page of his report indicates the damage to the laryngeal nerve is a not unexpected incident to any dissection in the area of the aorta:

> The injury to the recurrent laryngeal nerve is related to the operation but this is not unexpected in that the recurrent laryngeal nerve would be involved in the adhesions and scarring and any dissection and cross-clamping in this area would put this nerve at risk.

He did not indicate in his testimony at trial that this risk was one to be voluntarily disclosed to the patient.

[297] I have not found other references to the damage to this nerve and I am not persuaded that the principle of Farrell v. Snell, [1990] 2 S.C.R. 311, 72 D.L.R. (4th) 289, has any application. That case stands for the proposition the plaintiff must prove his case but the onus shifts and the defendants must disprove causation if there is evidence of negligence which might be a possible explanation for the damage claimed. The alleged negligence in not explaining the surgical options open to the patient bears no necessary relationship to the damage to the laryngeal nerve which may be caused by dissection whether or not the heart pump is used. The necessary nexus is missing.

V. CONCLUSION

[298] I would dismiss the appeal.

"The Honourable Mr. Justice Goldie"