Indexed as:

Duncan (Guardian ad litem of) v. Kemp

Between
Christopher Colton Duncan, an infant by his Guardian Ad Litem, Dale Hoffman and Tamara Rae Mayers, Plaintiffs, and Dr. Vernon Kemp and Dr. James R. Howey, Defendants

Vancouver Registry No. C866158

[1991] B.C.J. No. 1001

British Columbia Supreme Court

Mackinnon J.

Heard: April 30, May 1 - 4, 7 - 11, 22 - 23 and December 3 - 7 and 12, 1990
Judgment: May 1, 1991

Counsel for the Plaintiffs: John N. Laxton, Q.C. and Andrew Wilkinson.
Counsel for the Defendants: Harvey Grey, Q.C. and Andrew Wilkinson.

MACKINNON J.:-- The infant plaintiff is severely and permanently disabled. The first issue is whether these catastrophic injuries were caused by the negligence of doctors in the birth process of Christopher on December 18, 1984 at the Nanaimo

The claim for damages is against the general practitioner, Dr. Kemp, and an obstetrician and gynaecologist, Dr. Howey. The action against all other defendants has been either dismissed or discontinued.

BACKGROUND:

In 1984 Tammy Mayers was a single, 17-year-old student living in Nanaimo, B.C. In the summer a physician confirmed Tammy's suspicions that she was pregnant. She first consulted Dr. Kemp on September 18, 1984. He was her doctor from then until after the birth of Christopher. Dr. Kemp saw her regularly but there were no unusual problems or symptoms throughout the term of pregnancy. Her anticipated date of delivery was January 13, 1985.

DECEMBER 18, 1984:

Tammy Mayers was admitted to the hospital at 3:50 a.m. and gave birth to her son at 5:49 p.m. It was in the intervening hours that the negligence is alleged to have taken place.

By 4:00 a.m. labour pains were well established and recorded. Tammy's cervix was dilated three to four centimetres and was 90 percent effaced.

Progress during the morning hours was very slow. The cervix did not dilate further, nor did the baby descend in the a birth canal. At 1:30 p.m. Dr. Kemp artificially ruptured her membranes.

Shortly thereafter Dr. Kemp went to his clinic to attend to other patients. This office was about 10 minutes, by car, from the hospital. One of his associates at the clinic was the defendant Dr. Howey. The two discussed the medical circumstances of Tammy Mayers and, more particularly, the lack of progress. Dr. Howey recommended to Dr. Kemp that he order x-rays to determine if there was some reason to explain the delay in the descent of the baby. The specialist also suggested a cross-match of her blood in the event that a caesarian procedure became necessary. Dr. Kemp ordered both by telephone. He then proceeded to examine patients in his office.

About 3:30 p.m. Dr. Kemp was notified of the x-ray results. They showed Tammy's pelvic diameter was adequate for the descent of the baby. The reason for the delay in descent appeared to be a malposition of the head of the baby, known as a Brow presentation. In addition to explaining the lack of progress, this malposition could later cause complications in delivery unless corrected. A Brow presentation may selfcorrect, or it can be manually corrected, usually by a specialist, who rotates the baby's head into an occipital anterior position.

Very shortly after receiving this information, Dr. Kemp received a call from a nurse at the hospital. He was told that Tammy's cervix was fully dilated and she was in her second stage of labour. His immediate presence was requested. He left for the hospital without delay. None of this information was passed on to Dr. Howey.

Upon examination at the hospital Dr. Kemp confirmed that Tammy was fully dilated. The fetal heart rate was within normal limits. Some descent of the baby had occurred, but he was unable to determine the exact position of its head.

Dr. Kemp testified that a very short while later he noted that the fetal heart rate was accelerating to 180 and then decelerating to 100. To Dr. Kemp these changes were signs of fetal distress. He believed prompt action was required for the safety of the baby. He decided to go ahead with a delivery using forceps. Dr. Kemp told a nurse to call Dr. Howey and a paediatrician, Dr. Carr, requesting them to come to the hospital as soon as possible. However, because he concluded the situation was urgent and that immediate action was necessary, Dr. Kemp decided to act rather than to wait for the arrival of the specialists.

The patient was prepared by the nurses for delivery. Dr. Kemp applied forceps to the head of the baby and pulled to induce birth. This did not result in any progress in descent. After a brief wait, the second application of forceps took place. After some aggressive pulling, Christopher was delivered.

Dr. Carr arrived in the delivery room after the first application of forceps but before birth. Dr. Howey did not arrive until after the birth.

Upon delivery there was no discernible heart beat or respiration. The child had marked bruising and some swelling of the head. The initial difficulties in breathing were resolved when the paediatrician applied resuscitation. There were some signs of seizure activity. However, it was not until many months later that the severe neurological problems were diagnosed.

NEGLIGENCE OF DR. HOWEY:

The essential claim of the plaintiffs against Dr. Howey is that he failed to maintain adequate communications with Dr. Kemp. It is submitted that the general practitioner consulted him as a specialist because his patient was having problems. They say he then had a duty to make sure proper guidance was given to Dr. Kemp. This would involve reviewing the x-ray results and making himself available for further consultation and possible help in the delivery itself.

I do not find the action against Dr. Howey can succeed for the two following reasons:

1. I do not find the evidence shows that Dr. Howey was ever retained as a specialist.
2. Even if he was, he could reasonably expect Dr. Kemp to contact him should his services be required.

The two doctors practised in the same clinic. I would assume that the various doctors in the clinic often discussed patient problems. The offering of advice or suggestions in that context does not give rise to the inference that his services were retained. There is no evidence to support the proposition the doctors reached any sort of agreement concerning the future engagement of the time of Dr. Howey.

Let us assume that such a contract or agreement was understood by the two doctors. Dr. Kemp was to receive the xray results, and did so. Dr. Kemp was in contact with the hospital personnel. He was an experienced general practitioner. If a specialist's help was needed surely it was reasonable for Dr. Howey to assume that Dr. Kemp would call him. The evidence of Dr. Kemp supported such an understanding. He testified that he had intended to contact Dr. Howey about the x-ray results but did not do so because of the call from the hospital. At most Dr. Howey could have said, "Call me if you need help." This was unnecessary, because of the understanding between the two doctors.

It was submitted an adverse inference should be drawn because Dr. Howey did not testify. I do not think any adverse inference should be drawn. Dr. Howey was a party to this action and he was fully examined for discovery.

I find no negligence on the part of Dr. Howey and the action against him is dismissed.

NEGLIGENCE OF DR. KEMP:

Three headings of negligence are alleged against Dr. Kemp:

1. He failed to make adequate arrangements for a specialist to advise and assist him;
2. He ought not to have proceeded with the forceps delivery on his own; and
3. He was negligent in the delivery.

Tammy Mayers was admitted to hospital, in labour, about four weeks before the expected date of birth. The first indication of a real problem was the lack of descent of the baby during the morning and early afternoon hours. Dr. Howey suggested x-rays to see if the cause could be determined. In fact, the x-rays showed the probable reason was the Brow position of the baby's head. Dr. Kemp was aware that this malposition created some difficulties.

Dr. Kemp should have informed Dr. Howey of the x-ray results as soon as possible. I understand he agrees with this statement. What he does say is that there was not enough time to do so because of the urgent call from the hospital. Dr. Kemp further says he believes the Brow position may have corrected itself because it was reported that some descent of the baby had recently taken place. At the most this was an assumption that should have been discussed with a specialist, if one was available. Dr. Kemp may have been in a hurry. However, it would have been a simple matter, taking no more than a minute, for Dr. Kemp, or even one of his office staff, to notify Dr. Howey of the x-ray results and perhaps the call from the hospital. The two were sharing the same offices. I do not accept as reasonable, either the excuse there was insufficient time nor that the problem may have corrected itself, as a valid explanation for not contacting the specialist.

The plaintiffs put into issue the judgment of Dr. Kemp in proceeding with the forceps delivery on his own. The reason for doing so was his belief of fetal distress, a conclusion he made because he noted the fetal heart rate going from 100 to 180. It is unusual that only Dr. Kemp, of those present (there were two nurses in attendance) was aware of the heart rate fluctuation. Dr. Kemp must have believed there was a problem. There is no other rational reason why he would have proceeded on his own with this hazardous procedure.

The medical experts all agreed that an occasional reading of a low of 100 and a high of 180 in a fetal heartbeat is not considered a sign of distress. Some even though it was a positive sign of good health. At the most such a variance might be a warning that the situation should be closely monitored. Either Dr. Kemp over-reacted or he did not properly understand the consequences of such a change in the fetal heart rate.

The evidence of the position of the baby in the birth canal was not only contradictory but confusing. The terms to indicate the position of descent varied from one witness to another and, in most cases, were different than the terms used on the hospital record. The higher the baby in the birth canal the more dangerous the procedure. Until the head of the baby is at or near the pelvic floor, unless it is absolutely necessary, only a highly-trained specialist ought to perform a forceps delivery. Here the head of the baby clearly had not reached the pelvic floor.

There were other reasons that should have forewarned the doctor. This was the initial child of the mother and the baby was several weeks premature. The position of the fetal head was unknown and, finally, Dr. Kemp was not experienced in forceps delivery.

I find that it was imprudent for Dr. Kemp to have gone ahead with the forceps delivery without waiting for help to arrive.

The failure to inform Dr. Howey about the x-rays, taken together with the decision to go ahead with the difficult delivery on his own, moves the behaviour of Dr. Kemp beyond an error in judgment to become negligence.

CAUSATION:

The finding of negligence on the part of Dr. Kemp does not necessarily mean the plaintiffs are entitled to damages. The nature of Christopher's disabilities is not in dispute. The major issue is the timing of their occurrence. The plaintiffs' medical witnesses testified the most probable time of the cause of the injuries was at the time of birth and they were likely caused by the application of the forceps to the baby's head. Medical witnesses called by the defendants testified that the more probable time of occurrence was some time before birth during pregnancy.

These two theories were advanced by several eminent specialists. For the purposes of these reasons, reference will primarily be made to the reasoning of two paediatric neurologists, Dr. Andre Anzarut and Dr. Kevin Farrell.

DEFENDANTS' THEORY OF CAUSATION:

It is now known that the infant plaintiff has a congenital abnormality known as optic nerve hypoplasia ("O.N.H."). The cause is poorly understood but it is traditionally thought to occur in a fetus during the early weeks of pregnancy, normally in the 6 to 32 week period. It is an abnormality that affects the optic nerve or disc. 0.N.H. usually results in loss of eyesight that can range from partial to complete blindness. It often results in structural damage to the brain with neurological symptoms similar to those found in Christopher.

The defendants' medical experts say the present problems of Christopher were probably caused by this congenital defect which took place during the pregnancy, long before the time of delivery.

Dr. Farrell said it was his opinion, from a review of the records, that the severe neurological problems of Christopher are more consistent with an O.N.H. cause than any event that took place near the time of birth.

Dr. Farrell has several reasons for this conclusion, but I understand the principle one is what the records indicate concerning asphyxia. He says that the amount and duration of the asphyxia that occurred at or near the time of birth was insufficient to cause the severe neurological damage known to be present in Christopher. On the other hand, this damage is quite consistent with symptoms caused by O.N.H.

Apgar scores are a method of grading newborn babies. Babies are assigned points in the areas of heart rate, respiratory effort, muscle tone, reflex irritability and colour. The physician rates these conditions three times in the 10 minute period following birth. The results are meant to give a general indication of the condition of the newborn. Here, the first scores were moderately low. A few minutes later, the results showed improvement. On the third reading the Apgar score for Christopher was 8 out of a possible 10. Dr. Farrell says that had a hypoxic/ischemic event occurred at the time of birth sufficient to cause these known damages:

(a) there would have been a very depressed initial Apgar score; and

(b) no significant improvement would have taken place within the 10 minute period.

Christopher's head size at 5 years of age is within normal limits. Dr. Farrell says a normal consequence of severe brain damage caused at the time of birth would be a marked reduction in head size as the infant grows older.

Christopher's immediate respiratory problems do not necessarily suggest a neurological cause to Dr. Farrell. The baby was diagnosed as having a "wet lung". Such a condition causes respiratory difficulties. The respiratory problem with Christopher was short-lived, which Dr. Farrell says is more consistent with a cause of "wet lung" than a neurological cause.

For these, and other reasons, Dr. Farrell concludes a congenital defect occurring some months before the time of birth was the probable cause of Christopher's present problems.

PLAINTIFFS' THEORY OF CAUSATION:

Some time later Christopher was diagnosed as having periventricular lukomalacia ("P.V.L."). This has recently been confirmed with a C.T. scan. P.V.L. is a neuropathologic lesion of the brain. It is usually found in babies born prematurely. P.V.L. is commonly cause by a hypoxic/ischemic event occurring at or near the time of birth.

Dr. Anzarut concedes that O.N.H. is present and that it can result in brain damage and symptoms similar to those found in Christopher. However, it is his opinion that the records indicate that an event took place at the time of delivery which is much more likely to be the origin of these neurological problems that the 0.N.H. He believes the application of forceps to the head of the baby caused the hypoxic/ischemic situation which in turn resulted in the brain damage now known to be P.V.L.

A major difference of opinion between Drs. Farrell and Anzarut is their view of the consequences of the hypoxic/ ischemic event. Dr. Farrell said it was not of sufficient duration to cause such severe brain damage. Dr. Anzarut disagreed. Although the duration of the event may have been relatively brief, he said that if it was significant enough this could very easily result in the brain damage present here.

If O.N.H. did cause damage to the brain sufficient to cause neurological problems there would be structural damage to the brain. The C.T. scan which demonstrated the P.V.L. did not show any such structural damage. This is certainly not conclusive evidence because such damage could be present and not be seen on the C.T. scan. Nevertheless, Dr. Anzarut considers this a factor to be taken into consideration on this issue.

Dr. Anzarut does not draw the same inferences from the Apgar scores as does Dr. Farrell. Dr. Anzarut testified the scores are quite consistent with his opinion the neurological damage was caused at the time of birth. The improvement in the scores can be explained by the resuscitation and the application of oxygen to the newborn child by the paediatrician. Dr. Anzarut emphasized he placed more reliance on other information shown in the records than he did on the Apgar scores.

Another area of disagreement is the significance of Christopher's normal head size at this time. Dr. Anzarut does not believe the damage to the brain if caused by P.V.L. (as Dr. Anzarut says occurred here) would result in any loss to the size of the head. He says the damage caused by P.V.L. could result in some loss of weight but it would not affect a external measurements of the head.

Dr. Anzarut testified that the defendants' theory that 0.N.H. caused Christopher's injuries was based on conjecture, with no factual evidence to support it, There is no record of any fetal distress in the months of pregnancy until the time of birth. The mother did not notice any difficulties with the baby prior to December 18, 1984. There is no evidence of any significant

insult during pregnancy that would cause the 0.N.H. There is no radiological evidence to show the structural damage to the brain which would accompany O.N.H. induced brain damage.

On the other hand, we have positive evidence that a hypoxic/ ischemic event took place in a premature baby at or near the time of application of the forceps. It is the opinion of Dr. Anzarut that this fully explains Christopher's medical disabilities and is a much preferred choice of causation to a choice based primarily on conjecture.

FINDINGS ON CAUSATION:

The question of burden of proof, particularly in medical malpractice suits, was recently considered in Snell v. Farrell (1990), 110 N.R. 200 (S.C.C.). Mr. Justice Sopinka points out the traditional approach to burden of proof may, depending upon the facts, be varied in order to avoid unfairness. Should the facts be particularly within the knowledge of the defendant, very little evidence by a plaintiff may be sufficient to drawn an inference of negligence. In other words, one must look to the facts to see if the normal burden of proof is to be varied to ensure the issues are fairly considered. At p. 218, Sopinka J. states:

> In many malpractice cases, the facts lie a particularly within the knowledge of the defendant. In these circumstances, very little affirmative evidence on the part of a the plaintiff will justify the drawing of an inference of causation in the absence of evidence to the contrary. This has been expressed in terms of shifting the burden of proof.

On these facts I do not consider it necessary to apply anything but the normal burden of proof to see that the issues are properly and fairly considered. We are now dealing with the issue of causation. The evidence relied on by both the plaintiffs and the defendants on this question is provided solely by experts not present when the events took place. The facts relied upon by these experts are basically the same. They come from the medical records and examinations of Christopher conducted after delivery. There is no advantage for the defendants in any first-hand knowledge they may have on the issue of causation.

On the evidence before me, I find that it is probable the severe neurological problems of Christopher are a result of a hypoxic/ischemic event caused by the application of forceps to the head of the baby at the time of delivery.

I come to this conclusion because I find the opinions expressed by Dr. Anzarut most persuasive and consistent with the proven facts.

It is highly likely Dr. Kemp used considerable force in his use of the forceps. He believed there was acute fetal distress. presumably he thought the baby might die unless quickly delivered and given medical assistance. The position of the head of the baby was not known, but we know that it had not descended to the pelvic floor. I accept the opinion evidence that the use of forceps under all of these circumstances by an inexperienced person could well result in asphyxia to the baby.

It is a fact that Christopher has both periventricular lukomalacia and optic nerve hypoplasia. The fact that P.V.L. occurs most often to premature babies as a result of a hypoxic/ ischemic event certainly fits with the facts in this case. I accept the opinion of Dr. Anzarut that a severe hypoxic/ ischemic event, even though of relatively short duration, can result in the significant

neurological disability that is here present.

The lack of any specific evidence of earlier fetal distress or structural brain damage to support an O.N.H.- caused brain damage are factors in my preference of the plaintiffs' experts' theory of causation.

IMPAIRED VISION:

Christopher suffers from a severe visual impairment. There is the issue of whether Christopher would have this disability even if he did not have P.V.L.

Most persons who suffer from O.N.H. have sight problems ranging from moderate to complete blindness. P.V.L. sufferers are also often blind because of damage to the white matter of the brain.

The majority of the expert evidence on this issue was based on the assumption the only visual condition present was optic nerve hypoplasia. I find that a recent examination of the child, conducted under anaesthetics, has proved that a assumption incorrect. The child suffers from both optic nerve hypoplasia and optic atrophy. This finding is unchallenged by the defendants. Further, I find the hypoplasia to be of a mild to moderate degree rather than severe, as stated in the report of the opthamologist retained by the defendants. The significance of this finding is that the more severe the hypoplasia the earlier in the pregnancy one would expect it to appear. Here, the degree of the O.N.H. supports the theory it was caused late in the pregnancy and perhaps during the delivery process.

Dr. Carrothers, a paediatric opthamologist, testified recent studies indicate that where both O.N.H. and optic atrophy are present a single insult can be responsible for both conditions.

Dr. Carrothers is of the opinion that Christopher's O.N.H. and optic atrophy can best be explained by attributing them to the hypoxic/ischemic event that occurred during the course of delivery. This opinion was based on her review of the records and the statements of Tammy Mayers which did not disclose any other problems or significant events during the pregnancy. The precise etiology of O.N.H. is still unknown. However, it is known that certain factors, such as drug or alcohol abuse during pregnancy could contribute to the condition. None of those factors were present on these facts.

I accept the opinion of Dr. Carrothers that the cause of the 0.N.H. and the optic atrophy was the same hypoxia/ischemic event which caused the P.V.L. In the result, Dr. Kemp is liable for all of the injuries suffered by Christopher.

D A M A G E S

NON-PECUNIARY:

Christopher is severely and permanently handicapped. His major injuries are:

- cerebral palsy;
- spastic quadriparesis;
- mental retardation;
- seizures; and
- blindness.

He is now 6 years old. Christopher cannot walk and will be confined to a wheelchair for life. He will always require assistance with bathing, dressing, eating and toileting. He is classified as legally blind.

In assessing general damages the only question is whether or not the upper limit of $228,000 is an appropriate award.

There are a few reasons to consider a modest reduction from the maximum award. There is no evidence to show Christopher is aware of his dramatic difference from other children. He is not subjected to constant pain. He attends school regularly. He enjoys swimming, being outdoors and listening to music and videos. Christopher is described as "a pleasant, cooperative, happy, severely retarded boy".

I assess his award for general damages at $200,000.

INTEREST ON NON-PECUNIARY AWARD:

The $200,000 award has taken inflation into account since past decisions were given.

The defendants submit that Leischner v. West Kootenay (1986), 70 B.C.L.R. 145 is authority for a court order interest rate of 5 percent, rather than that set by the registrar.

The Leischner decision was discussed in Graham v. Grant (1990), 46 B.C.L.R. (2d) 151. The headnote accurately sets out the court's conclusions:

> The defendant physician performed surgery on the plaintiff's knee in 1974 and in 1978. In 1984 the plaintiff's leg was amputated above the knee and she successfully sued the defendant for negligence in failing to diagnose and treat osteomyelitis which had developed in the leg. The 1988 judgment included an award of $150,000 for non- pecuniary damages. In supplementary reasons delivered in February 1989 the trial judge allocated $25,000 of that sum to the initial treatment in 1974 and the balance to the subsequent deterioration of the leg. The defendant was ordered to pay court order interest on $25,000 for September 1974 and on the balance of $125,000 from December 1978. The judge chose a rate of 10 per cent, partly because of the difficulty in assigning an inflation factor to the award. On that basis, the defendant was ordered to pay interest in the sum of $155,172. The defendant appealed the interest award.
>
> Held - Appeal allowed; interest rate fixed at 5 per cent.
>
> The purpose of an inflation factor in a personal injury award is to preserve the real value of the award, while the purpose of an award of interest is to compensate a plaintiff for being kept out of his or her money. To apply a commercial rate of interest to an award already adjusted for inflation would overcompensate the plaintiff. In 1978 the Supreme Court of Canada established an upper limit of $100,000 for non-pecuniary damage awards, which has since risen to about $200,000. Therefore, the $150,000 award in this case has to be taken as reflecting inflation for the 1974 to 1988 period. Commercial interest rates over the same period averaged about 10 per cent.

> If the trial judge had taken those factors into account, he would have fixed the interest rate at the statutory minimum of 5 per cent.

The facts here seem to be similar to those in Graham v. Grant.

Interest on the award for general damages will be at the rate of 5 percent.

COST OF FUTURE CARE:

Christopher will always be dependent upon others for his care. The first issue to be decided is where that will take place. Two options are suggested:

1. That he remain at home, and be cared for by constant attendants, or
2. That he move into a group home at age 19 and be cared for with a few other disabled persons.

It is agreed that Christopher ought to remain with his family and he will likely attend school until he is 19 years of age. It is difficult to guess what will be best for him, and his parents, 13 years from now. However, a choice must be made now for the purpose of making an award under this heading.

Group homes to care for disabled persons have dramatically changed from institutional care that was the norm 10 or 20 years ago. presumably the future will see further changes. The changes have been very much for the benefit of the patients, with considerably more personal and professional attention paid to the disabled person's needs.

Nevertheless, the experts in this field agree that, where a family has the desire and the ability to care for a disabled person, from the disabled person's viewpoint, it is preferable to care for that person at home, rather than in a group home.

When Christopher is 19 he will be physically much larger than now and more difficult to handle. Dr. van Rijn has this to say:

> There is a trend now in British Columbia to place people with severe physical impairments/disabilities, into smaller group home-like settings instead of being in hospital. This situation also applies to people who have previously lived with their families and the families can no longer cope or manage with the impaired person. This would free a parent/caring person from the ongoing daily care needs and services required for the disabled person . . . In such group homes attendant care is provided by people who are familiar with and have an understanding of the problems that can occur with the impaired person. Up to six or eight individuals can be cared for in such a setting . . . .

Tammy Mayers has testified she wants and intends to have her son remain with her at home for the rest of his life. This statement must be seriously considered when viewed with the devotion to Christopher she has demonstrated for six difficult years.

The decisions referred to me by counsel suggest the overriding principle of reasonableness in future care awards places a much higher emphasis on the best interests of the patient than on any other factor.

Here, I am convinced the best interests of Christopher will be served by his remaining with

his mother, both before and after he is 19. The award for future care will be on this basis.

ACCOMMODATION:

The family home will need to be modified to correspond to the disabilities of Christopher. The only evidence as to the cost is provided by an architect who specializes in homes for the disabled and a cost and quantity surveyor. There is nothing in the reports I can say is unreasonable.

The sum of $81,890 is awarded for modification.

LONGEVITY:

This finding will have a major effect on awards for future care and loss of income.

The three experts agree that Christopher's disabilities will reduce his life expectancy. They do not agree to what extent.

Dr. Andrews stated in his report of October, 1989 that he thought the infant would live until his mid or late 30's. At trial, he said he expected him to live to his mid 40's or possibly even to his late 40's. He said he revised his estimate because Christopher was now almost six and survival of the earlier years involved applying new statistics.

In his report Dr. van Rijn placed Christopher's life expectancy at 58. At trial he said Christopher would likely live to his 40's. He said he did not take into account the infant's seizures when giving his original opinion.

Dr. Farrell estimated Christopher's life expectancy to be age 35.

I find that the best estimate of the life of Christopher is 44 years of age.

FUTURE CARE:

A. Equipment, Supplies and Transportation

Two experts, Mrs. Schulstad and Ms. Harris, submitted written reports and gave oral evidence.

The infant plaintiff is entitled to an award to provide reasonable care, justified by reason of his condition. The evidence is not too helpful to me where the two witnesses disagree on the need and cost of items in order to make a fair award. It is tempting to accept a suggestion that an average be taken on the disputed items. However, I do not consider that will likely result in a fair award.

After reviewing the reports of the two and reading my notes of their evidence, I have decided to accept the figures submitted by Mrs. Schulstad, with the exception of the $500 annual cost of medication. I was not able to find any reliable medical justification to support its inclusion.

My calculation of these costs is:

1. Initial Costs . . . . . $41,380.

2. Annual Costs to age 19 . . . . 8,697.

3. Annual Costs after age 19 . . . 8,145.

B. Attendant Needs

Christopher will receive an award for attendant costs while he remains at home. The amount and cost of this help is in dispute.

During his waking hours constant attention, or at least observation, is needed. Help is needed in feeding, bathing, bowel and bladder evacuation, transfers to and from bed and toilet and wheelchair, and other activities. Outside he must be driven or pushed to school or any other destination.

At night, when the infant sleeps, someone must be within hearing distance to respond to his needs.

There is evidence that a medical service organization in Vancouver provides trained personnel on a 24-hour basis for $139.40 a day. The defendants do not concede 24-hour help is needed. However, they submit that sum is the absolute ceiling that ought to be awarded for attendant care. I am sceptical that any single person could continuously provide the care and attention needed by Christopher each and every day. I am assuming he will need about 14 hours of full time care during the day. That may be possible to provide for some patients who do not require constant supervision and- help. I do not consider that reasonable here when realistically looking at the care that will be needed for Christopher.

On the other hand, it does not appear to me that it is necessary or reasonable to provide one attendant to assist with basic care, another as an aide in school and yet another to provide life-skills.

I think it reasonable that an attendant or attendants be provided for Christopher for 14 hours a day. Such a person ought to be able to look after the needs of Christopher whatever designation is given to the attendant.

With respect to the night hours, when the infant is normally asleep, there will be no award for an attendant. To compensate the mother for any interruption in her sleep, there will be an award for generous respite help.

The annual attendants' cost at $14.00 an hour for a 14-hour day is $71,540.

The report of Ms. Harris states that Sunny Hill Hospital provides respite help for persons such as Tammy Mayers for a total of two weeks and four weekends a year at no charge. Even if this is available, I believe it is only fair and reasonable to provide for a great deal more time off for the mother. For respite care I award the annual sum of $8,000. This should enable the mother to hire replacement help several times a month as well as allowing occasional additional holidays.

C. Therapy

The evidence to support a proper award for therapy is unsatisfactory. The figure of $6,650 on an annual basis poses two major problems: (i) I can find no medical evidence to support some of the therapy; and (ii) the need and cost of some therapy will change when Christopher leaves school. No consideration has been given to this.

The defendants say a good deal of any treatment necessary for Christopher will be supplied free of charge by school boards or other agencies. Some of the witnesses referred to waiting lists for some of this free care. Others thought a means test for some services could disqualify Christopher.

The best evidence may be that of the defendants, but I am convinced that, for reasonable care, it will cost more than the amounts suggested by them ($320 a year until age 19 and $800 a year thereafter).

I allow $500 a year until age 19 and $1,000 a year after 19.

In summary, the awards for future care are:

Equipment and Supplies:

Initial Costs $ 41,380
Annual Costs - to age 19 8,697
Annual Costs - after age 19 8,145
Attendants:

Annual Costs 79,540

Therapy:

Annual Costs - to age 19	500
Annual Costs - after age 19	1,000

FUTURE LOSS OF INCOME:

Christopher is entitled to an award for future wage loss. The statistics generally show that the more education a person achieves the higher the expected earnings. One guide to determining how far any child might progress in school is to look at what the child's parents did. Here, that is of limited help. The mother stopped going to high school to give birth to Christopher. She no longer lives with the natural father. The evidence discloses little about the present family situation of the mother except she is employed and has another child.

I will proceed on the basis that Christopher would be a British Columbia high school graduate. The average lifetime loss of earnings for a high school graduate is $503,230. In addition to this, a high school graduate - or any other worker - could expect to receive additional benefits such as medical plans, unemployment insurance, pension plans and other non-wage benefits. These average about 12 percent of the money income.

If some allowance is made in the cost of future care for basic living expenses, that is to be deducted from the income award. Here, the majority of the award for future care is limited to additional costs as a result of the disability of Christopher. However, a few should be considered as living expenses such as transportation and future medical expenses.

I find a reasonable deduction is warranted and I fix it at the amount of the future non-wage benefits.

This leaves the issue of what is referred to as the "lost years". The plaintiff will be awarded wages based on a normal life expectancy. The issue is whether any deductions are to be taken from that award for basic living expenses after the age of 44 when, for purposes of other awards, he will be assumed to be dead.

There are two decisions in British Columbia where the trial judges reached different conclusions. I am informed one of these cases is under consideration by our Court of Appeal.

I find the reasoning of Lord Wilberforce in Pickett v. British Rail Engineering Ltd., [1979] 1 All. E.R. 774 persuasive. He says at p. 781:

> . . . the amount to be recovered in respect of earnings in the "lost" years should be that amount after deduction of an estimated sum to represent the victim's probable living expenses during those years. I think that this is right because the basis, in principle, for recovery lies in the interest which he has in making provision for dependants and others, and this he would do out of his surplus.

Taking into account money spent to live while earning an income would seem to result in the beneficiaries receiving their full entitlement. To not apply any deductions and theoretically allow the full amount to go to the estate would result in a windfall.

The decisions involved in this issue mention a 53 percent deduction as a conservative figure. I order a 53 percent deduction to be made from the wages for the "lost years". Presumably counsel will agree on the calculations.

MANAGEMENT FEES:

Christopher will need help to manage his investments and look after his finances throughout his life. Presumably this will be provided by the Public Trustee. An employee of that office gave evidence. The amount to be charged for looking after the funds would depend on many factors including assumptions on returns, the type of investments involved and the amount of money involved.

Counsel will probably be returning to make submissions on the tax gross-up and, unless agreement can be made, I ask for further submissions on this point. My review of my notes and any exhibits would otherwise leave me to make a calculated guess at a reasonable amount for the cost of management fees.

TAX GROSS-UP:

In order to ensure the money given for future care can pay for the necessary services, an amount needs to be made to compensate for payment of income tax. Unless counsel settle the

matter, further evidence and submissions will be necessary.

I make the following findings on this issue:

1. The existing law concerning changes in income tax relative to inflation will be used rather than anticipated changes.
2. The total income is to be considered but, if applicable, the fact the capital will decline may be taken into account.
3. I find a reasonable investor with this capital and these needs would use this portfolio mix:

(a) 60% - Interest and bonds

(b) 20% - Capital gains

(c) 20% - Dividends.

SPECIAL DAMAGES:

No mention was made of special damages in the written submissions nor could I find mention in my notes. The only reason they are mentioned is counsel for the plaintiffs gave to me a summary of the claims he was advancing and there was $5,880 requested for special damages.

TAMMY MAYERS CLAIM:

The law in Canada now clearly recognizes the responsibility of a defendant to pay damages for the additional work and services the mother has performed because of the disability of her son.

The decisions are not so helpful in setting out precedents for a reasonable amount. She is not to be compensated for all her efforts, but only for the extra time by reason of the injuries.

I assess damages for Tammy Mayers in the sum of $60,000 for these additional services during the last six years.

LAROCQUE ORDER:

The awards for future care and for future earnings will bear interest commencing 30 days from today at a rate representing the difference between 5 percent and the current rate set by the registrar.

C O S T S:

These may be spoken to by counsel.

I anticipate counsel will have to arrange a date to complete this trial. I would urge them to do so as soon as possible. If necessary they will be accommodated in the summer recess.

MACKINNON J.