



**SUPREME COURT OF CANADA** CITATION: Ediger v.  
Johnston, 2013 SCC 18 DATE: 20130404

**DOCKET:** 34408

**BETWEEN:**

**Cassidy Alexis Ediger, an infant by her Guardian *Ad Litem*,  
Carolyn Grace Ediger** rAppellant and **William G.  
Johnston** Respondent

**CORAM:** McLachlin C.J. and LeBel, Rothstein, Cromwell,  
Moldaver, Karakatsanis and Wagner JJ.

**REASONS FOR JUDGMENT:** Rothstein and Moldaver JJ.  
(McLachlin C.J. and LeBel, (paras. 1 to 62) Cromwell,  
Karakatsanis and Wagner JJ. concurring)

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EDIGER v. JOHNSTON

**Cassidy Alexis Ediger, an infant by her Guardian *Ad Litem*,  
Carolyn Grace Ediger**

v.

**William G. Johnston**

**Indexed as: Ediger v. Johnston**

**2013 SCC 18**

File No.: 34408. 2012: December 4; 2013: April 4.

*Appellant*

*Respondent*

Present: McLachlin C.J. and LeBel, Rothstein, Cromwell, Moldaver, Karakatsanis and Wagner JJ.

ON APPEAL FROM THE COURT OF APPEAL FOR BRITISH COLUMBIA

*Torts — Negligence — Causation — Doctor attempted mid-level forceps delivery of baby — Baby's umbilical cord became compressed causing bradycardia and brain injury — Doctor did not arrange for back-up Caesarean section delivery or advise mother of mid-level forceps delivery risks prior to attempting forceps delivery*

*— Whether doctor's attempted forceps delivery caused bradycardia — Whether doctor's failure to arrange for back-up Caesarean section delivery or to advise mother of mid-level*

*forceps delivery risks prior to attempting forceps delivery caused baby's injury.*

C suffered from persistent bradycardia during her birth, which led to her severe and permanent brain damage. After C's mother's labour did not progress as anticipated, the doctor decided to attempt to deliver C using a mid-level forceps procedure. Prior to initiating the procedure, the doctor did not inform C's mother of the material risks of a mid-level forceps delivery, which included bradycardia, and did not inquire into the immediate availability of surgical back-up to perform an emergency Caesarean section in the event of bradycardia. After the doctor applied the forceps, he decided to abandon the procedure and left the labour room to make arrangements for a Caesarean section. In the minutes that followed, C's umbilical cord became obstructed, leading to persistent bradycardia. C was delivered by Caesarian section approximately 18 minutes after the onset of the bradycardia and now suffers from spastic quadriplegia and cerebral palsy. The trial judge found that the doctor's application of the forceps likely caused the obstruction of C's umbilical cord that led to the bradycardia because the forceps displaced C's head and left a space into which the cord fell and became compressed upon a subsequent maternal contraction. The trial judge found that the doctor breached the standard of care, which required him to have surgical back-up immediately available

before attempting the mid-level forceps procedure and to obtain the mother's informed consent for that

procedure. The doctor, however, successfully appealed from the trial judge's finding that his breaches of the standard of care caused C's injury.

*Held:* The appeal should be allowed.

The sole issue here is causation: Did the doctor's breaches of the standard of care cause C's injury? Because causation is a factual inquiry, the standard of review for the trial judge's causation findings is palpable and overriding error. There was no such error here.

Contrary to the Court of Appeal's conclusion, the trial judge did not err by failing to account for the delay between the end of the forceps attempt and the onset of bradycardia. The trial judge accepted expert testimony that the doctor's attempt to position the forceps may have displaced the baby's head such that her umbilical cord would become compressed upon a subsequent maternal contraction, leading to bradycardia. It was open to the trial judge to do so. This theory explained the delay between the failed forceps attempt and the onset of bradycardia.

The trial judge also did not err when she concluded that the

doctor's failure to have surgical back-up immediately available was a "but for" cause of C's injury. Although the issue here is causation, the dispute turns on a proper understanding of the "immediately available" standard of care set forth by the trial judge. The doctor argues that the standard required only that he ensure prior to the forceps procedure that an anaesthetist would be available. The doctor argues that

satisfying this standard would have made no difference in the time it took to deliver C. The problem with the doctor's interpretation of the standard of care is that it is unresponsive to the risk in question. Considering the trial judge's reasons in their entirety, it is clear that the trial judge contemplated a standard of care that required the doctor to take reasonable precautions responsive to the recognized risk of bradycardia and the severe damage to the baby that results when bradycardia persists.

It is beyond dispute that the doctor did not take precautions to ensure that, in the event of bradycardia, C could have been delivered by Caesarean section without injury. He took no steps before beginning the mid-level forceps procedure to have surgical back-up immediately available even though there was no urgency that precluded him from doing so. He did not even inquire into the availability of an anaesthetist. That fell below the standard of care.

Because the trial judge did not err in finding that the doctor's breach of the duty to have surgical back-up immediately available caused C's injury, it is not necessary to consider whether the doctor's breach of the duty to obtain the mother's informed consent also caused C's injury. However, the trial judge's informed consent analysis further confirms that the duty to have back-up surgical staff "immediately available" required more than simply ensuring that an anaesthetist was available.

### **Cases Cited**

**Referred to:** *Hill v. Hamilton-Wentworth Regional Police Services Board*, 2007 SCC 41, [2007] 3 S.C.R. 129; *Clements v. Clements*, 2012 SCC 32, [2012] 2 S.C.R. 181; *Resurfice Corp. v. Hanke*, 2007 SCC 7, [2007] 1 S.C.R. 333; *H.L. v. Canada (Attorney General)*, 2005 SCC 25, [2005] 1 S.C.R. 401; *Snell v. Farrell*, [1990] 2 S.C.R. 311.

### **Statutes and Regulations Cited**

### **Authors Cited**

APPEAL from a judgment of the Court of Appeal for British Columbia (Saunders, Smith and Groberman JJ.A.), 2011 BCCA 253, 19 B.C.L.R. (5th) 60, 305 B.C.A.C. 271, 515 W.A.C. 271, 333 D.L.R. (4th) 633, [2011] 8 W.W.R. 466, 82 C.C.L.T. (3d) 228,

[2011] B.C.J. No. 974 (QL), 2011 CarswellBC 1279, setting aside a decision of Holmes J., 2009 BCSC 386, 65 C.C.L.T. (3d) 1, [2009] B.C.J. No. 564 (QL), 2009 CarswellBC 773. Appeal allowed.

*Vincent R. K. Orchard, Q.C., Steven Hoyer, Susanne Raab and Paul T. McGivern*, for the appellant.

*James M. Lepp, Q.C., Michael G. Thomas and Daniel J. Reid*, for the respondent.

The judgment of the Court was delivered by ROTHSTEIN ANDMOLDAVER JJ. —

[1] Cassidy Ediger, now 15 years old, suffered from persistent bradycardia during her birth that caused severe and permanent brain damage, leaving her with spastic quadriplegia and cerebral palsy. Cassidy, by her guardian *ad litem*, sued Dr. William G. Johnston, the obstetrician who delivered her, alleging that her injury resulted from negligence associated with an attempt to deliver her using a mid-level forceps procedure. The trial judge found that Dr. Johnston breached the standard of care expected of him in the circumstances by failing to ensure that back-up surgical staff would be immediately available to deliver Cassidy by Caesarean section (“C- section”) upon complications arising from

the mid-level forceps delivery, and by failing to inform Cassidy's mother about the material risks associated with the forceps procedure. The only issue before us is whether the trial judge committed a palpable and overriding error in determining that Cassidy's injury was caused by these breaches. In our view, there was no such error.

## I. Facts

[2] Cassidy was born on January 24, 1998, to Carolyn and Scott Ediger. Early in the course of Mrs. Ediger's pregnancy, her family physician, Dr. Lisa

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LeGresley, referred her to Dr. Johnston based on a concern unrelated to the injury Cassidy ultimately sustained at birth.

[3] Mrs. Ediger consulted Dr. Johnston throughout her pregnancy. Based on a number of factors, Dr. Johnston considered her pregnancy to be high risk. As a result, he decided to induce the pregnancy before term, at 38 weeks. It is undisputed that the factors that made Mrs. Ediger's pregnancy high risk are irrelevant to Cassidy's subsequent injury.

[4] On January 23, Mrs. Ediger was admitted to Chilliwack General Hospital and Dr. Johnston began the induction process.



The next day, Mrs. Ediger's labour stalled, despite contractions that were strong in duration and intensity. Dr. Johnston determined that the baby was in deep arrest with its head positioned sideways. He therefore elected to proceed with a mid-level forceps rotation to deliver the baby. A forceps delivery involves positioning a forceps blade on each side of the baby's head and assisting the baby through the birth canal. A "mid-level" forceps delivery is the riskiest type of forceps delivery that obstetricians are permitted to attempt because it takes place when the baby is at the beginning of the birth canal. In this case, the baby's head had to be rotated before the baby could be assisted through the remainder of the birth canal.

[5] Dr. Johnston did not anticipate that anything would go wrong with the mid-level forceps procedure and therefore did not inform Mrs. Ediger of the potential risks associated with it. These risks included compression of the baby's umbilical

cord, leading to persistent fetal bradycardia (a sustained drop in the baby's heart rate prior to delivery), which may in turn cause severe brain damage.

[6] Dr. Johnston attempted the forceps procedure while Mrs. Ediger was in a regular labour room, located close to a high risk operating room that was used to perform C-sections. Prior to

initiating the forceps procedure, Dr. Johnston did not inquire into the availability of an anaesthetist or operating room staff to assist with an emergency C-section in the event that complications were to arise during the forceps attempt.

[7] According to the evidence accepted by the trial judge, Dr. Johnston applied the first forceps blade and attempted to apply the second forceps blade. Unhappy with the placement of the second blade, however, he elected to abandon the forceps procedure and proceed with a C-section.

[8] At that point, Dr. Johnston left the labour room to make arrangements for a C-section. He contacted the on-call anaesthetist, Dr. Charles Boldt, to assist. Dr. Boldt informed Dr. Johnston that he was occupied with an emergency life or death surgery in another operating room and anticipated that he would be unavailable for another hour. Dr. Boldt suggested that Dr. Johnston contact the next on-call anaesthetist, who was off site but could arrive within 30 minutes.

[9] While Dr. Johnston was attempting to make these arrangements, Dr. LeGresley, who remained in the labour room with Mrs. Ediger, saw the baby's heart

rate drop on the heart rate monitor. Dr. LeGresley, over the course of 20 to 30 seconds, confirmed that the drop continued, indicating

persistent fetal bradycardia. She then called out to Dr. Johnston that Mrs. Ediger needed an emergency C-section.

[10] When Dr. Johnston returned to the room, he attached a fetal scalp clip to the baby's head to confirm that the heart monitor observed by Dr. LeGresley provided an accurate representation of the baby's heart beat. Within approximately two minutes, he was able to confirm persistent bradycardia. It is undisputed in these proceedings that the persistent bradycardia resulted from an obstruction of the baby's umbilical cord.

[11] At this point, Dr. Johnston again contacted Dr. Boldt, who was still occupied in the other emergency surgery, and informed him that Mrs. Ediger needed an emergency C-section. Mrs. Ediger was transferred to the high risk operating room, where she was prepped for surgery. In the meantime, Dr. Boldt stabilized his patient and rushed over to anaesthetize Mrs. Ediger. On arrival in the operating room, Dr. Boldt anaesthetized Mrs. Ediger and then Dr. Johnston delivered Cassidy by C- section.

[12] In the end, Cassidy was delivered approximately 20 minutes after Dr. Johnston's failed forceps attempt (approximately 18 minutes from the onset of bradycardia). As a result of the sustained bradycardia, Cassidy suffered severe and permanent brain damage. She lives her life with spastic quadriplegia and cerebral

palsy. She is non-verbal, tube-fed, confined to a wheel chair and totally dependent on others for all of her daily needs. Her life expectancy is 38 years.

## II. A.

### Procedural History

*Supreme Court of British Columbia, 2009 BCSC 386, 65 C.C.L.T. (3d) 1*

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[13] Columbia alleging that Dr. Johnston was negligent in his attempt at a forceps delivery. In particular, she alleged that the standard of care required Dr. Johnston to perform the forceps procedure with a “double setup”. In the alternative, Dr. Johnston was required to arrange for back-up staff that would be immediately available to deliver Cassidy by C-section if the forceps procedure failed. Cassidy also alleged that Dr. Johnston was negligent for failing to obtain Mrs. Ediger’s informed consent to the forceps procedure because he did not advise her of the material risks associated with the mid-level forceps procedure.

[14] A great deal of the evidence at trial focused on whether a “double setup” was required by the standard of care for mid-level forceps deliveries. Where a double setup is used, the forceps

delivery is performed in an operating room with an anaesthetist and operating room staff standing by, and all of the materials for a C- section prepped. If the forceps procedure fails, the mother's legs are lowered, her abdomen is painted with an antiseptic and the baby is delivered by C-section. The

Cassidy filed a statement of claim in the Supreme Court of British evidence at trial indicated that in a double setup situation, a baby could be delivered by C-section two to five minutes from the time a forceps procedure is abandoned.

[15] In her reasons for judgment, Holmes J. rejected Cassidy's claim that the standard of care at the time mandated a double setup. Holmes J. acknowledged the testimony of some experts who stated that the well-recognized high risks associated with a mid-level forceps delivery required a double setup. Although she agreed that the trend was to perform these procedures with a double setup, she accepted the testimony of Dr. Johnston and his experts that, at the time of Cassidy's delivery, it was not uncommon to proceed without a double setup.

[16] Holmes J. agreed with Cassidy, however, that the applicable standard of care incorporated the less stringent requirement that surgical back-up be "immediately available" to deliver the baby by C-section upon failure of the mid- level forceps attempt, consistent

with the guidelines of the Society of Obstetricians and Gynaecologists of Canada. She found that Dr. Johnston did not meet this standard of care. According to Holmes J., when Dr. Johnston initiated his forceps attempt, he faced a non-urgent scenario and had time to assemble a surgical team. Instead, however, he took “no steps” to ensure that surgical back-up would be immediately available (para. 94). Holmes J. emphasized that Dr. Johnston had not even inquired as to whether the on-call anaesthetist was available prior to initiating the forceps procedure. As a result,

Dr. Boldt [the anaesthetist] and his nursing staff were “present” in the hospital only in the most literal sense, when Dr. Johnston attempted the mid-forceps delivery. They were completely occupied with another very high-risk situation, and expected to remain so occupied for at least another hour. No other anaesthetist was in the hospital or even formally on-call. [para. 83]

Holmes J. found that, by proceeding in the manner that he did, Dr. Johnston breached the standard of care expected of a physician in the circumstances.

[17] Holmes J. also found that Cassidy had established causation. In particular, she found that Dr. Johnston’s forceps attempt was a “but for” cause of the persistent bradycardia and that Dr.

Johnston's failure to have surgical back - up immediately available was a "but for" cause of Cassidy's injury. She concluded:

In the result, back-up was provided and Cassidy was delivered within about eighteen minutes. This was probably the best possible outcome in the circumstances Dr. Johnston had created when he proceeded with the attempt while Dr. Boldt was tied up with another life and death situation. However, minutes mattered, and with the passage of time Cassidy's bradycardia had done its damage. Had back-up been available even five to ten minutes more quickly, most — possibly even all — of Cassidy's injuries could have been avoided. [para. 138]

These causation findings, which are a subject of this appeal, are examined in detail below.

[18] Holmes J. also found that Dr. Johnston breached his duty to obtain informed consent before proceeding with the forceps delivery by failing to advise Mrs. Ediger of the material risks associated with the procedure. Holmes J. found it unnecessary to determine whether Mrs. Ediger would have foregone the forceps procedure altogether if she were properly advised because she found that, at the very least, Mrs. Ediger, properly informed, would have delayed the forceps procedure until Dr. Johnston had arranged for immediately available surgical back-up. Given

Holmes J.'s earlier finding that Cassidy's injury would have been avoided with surgical back-up, it followed that Dr. Johnston's failure to advise Mrs. Ediger also caused Cassidy's injury.

[19] Holmes J. thus concluded that Cassidy had successfully established her negligence claim. She awarded Cassidy \$3,224,000 in damages, which included non-pecuniary loss, special damages, future care and loss of earnings.

*B. British Columbia Court of Appeal, 2011 BCCA 253, 19 B.C.L.R. (5th) 60*

[20] The Court of Appeal for British Columbia allowed Dr. Johnston's appeal. On appeal, Dr. Johnston did not dispute the trial judge's articulation of the standard of care expected of him or the trial judge's finding that his performance fell below that standard. With respect to his liability for negligence, Dr. Johnston challenged only whether his breaches of the standard of care had in fact caused Cassidy's injury. The parties also cross-appealed on the damages award.

[21] Writing for a unanimous court, Smith J.A. held that the trial judge erred in finding that Dr. Johnston's breaches caused Cassidy's injury for two reasons. First, the evidence did not support the trial judge's conclusion that Dr. Johnston's forceps attempt caused the cord compression and the resulting bradycardia



that led to

Cassidy's injury. According to Smith J.A., "[t]he undisputed evidence was that fetal bradycardia would occur within seconds of cord compression. Therefore, if Dr. Johnston's attempted forceps delivery had caused the cord compression, fetal bradycardia would have occurred almost contemporaneously with the forceps procedure" (para. 86). Because the trial judge found that the fetal bradycardia began "within at most one and two minutes" *after* the forceps attempt (at para. 124), the bradycardia could not have been caused by the forceps attempt.

[22] Second, Smith J.A. held that the trial judge erred in finding that Dr. Johnston's failure to have adequate back-up available caused Cassidy's injury. Although it was conceded that Cassidy probably would have been unharmed if she were delivered 10 minutes earlier, there was no evidence that having a back-up team present would have sped up her delivery. Thus, it was not established that Cassidy's injury would have been avoided if Dr. Johnston had arranged for immediately available surgical back-up or if Mrs. Ediger, properly informed, had delayed the forceps attempt until back-up was available.

[23] Having found that Cassidy failed to establish causation, Smith J.A. allowed the appeal and dismissed the action without

considering Dr. Johnston's appeal and Cassidy's cross-appeal as to the damages award. Cassidy now appeals to this Court.

### III. Analysis

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[24] An action for negligence requires proof of a duty of care, breach of the standard of care, compensable damage, and causation: *Hill v. Hamilton-Wentworth Regional Police Services Board*, 2007 SCC 41, [2007] 3 S.C.R. 129, at para. 96. Here, Dr. Johnston does not dispute that the first three requirements are met. He had a duty to meet the requisite standard of care by arranging for surgical back-up to be "immediately available" before attempting the mid-forceps procedure. And he had a duty to obtain Mrs. Ediger's informed consent. He breached both of these duties. Furthermore, as described above, Cassidy suffered severe and permanent brain damage that leaves her completely dependent on her family and community for care, clearly compensable damage.

[25] The sole issue here is causation: Did Dr. Johnston's breaches of the standard of care cause Cassidy's injury?

[26] Dr. Johnston advances three arguments as to why the trial judge erred in concluding that his breaches were the cause. The first argument relates to a threshold matter of whether Cassidy's fetal bradycardia was caused by the forceps procedure or would

have arisen independent of the procedure. Dr. Johnston submits that the fetal bradycardia would have occurred independent of the procedure and thus his breaches of the standard of care leading up to the procedure were not “but for” causes of Cassidy’s injury. Dr. Johnston’s second and third arguments accept the premise that the forceps procedure caused Cassidy’s bradycardia and argue that causation is not established because Cassidy’s injury would have occurred even if he had met the

standard of care. In particular, Dr. Johnston argues that even if he satisfied his duty to have an anaesthetist immediately available, Cassidy would not have been delivered sooner. He also argues that even if Ms. Ediger, properly advised of the material risks of proceeding without back-up, would have postponed the forceps procedure, there is no evidence that the result would have been different in the postponed forceps attempt.

[27]

In sum, the following three issues are raised with respect to causation:

- . (1) Did the trial judge err by concluding that Dr. Johnston’s attempted forceps delivery caused the persistent bradycardia?

- . (2) Did the trial judge err by concluding that Dr. Johnston’s failure to arrange for “immediately available” surgical back-up caused Cassidy’s injury?
- . (3) Did the trial judge err by concluding that Dr. Johnston’s failure to advise Mrs. Ediger of the material risks of a mid-level forceps procedure caused Cassidy’s injury?

### *The Legal Test for Causation*

A.

[28] *Clements*, 2012 SCC 32, [2012] 2 S.C.R. 181. Causation is assessed using the “but

This Court recently summarized the legal test for causation in *Clements v.*

for” test: *Clements*, at paras. 8 and 13; *Resurfice Corp. v. Hanke*, 2007 SCC 7, [2007] 1 S.C.R. 333, at paras. 21-22. That is, the plaintiff must show on a balance of probabilities that “but for” the defendant’s negligent act, the injury would not have occurred: *Clements*, at para. 8. “Inherent in the phrase ‘but for’ is the requirement that the defendant’s negligence was necessary to bring about the injury — in other words that the injury would not have occurred without the defendant’s negligence” (*ibid.* (emphasis deleted)).

[29] Causation is a factual inquiry (*Clements*, at paras. 8 and 13). Accordingly, the trial judge's causation finding is reviewed for palpable and overriding error (*H.L. v. Canada (Attorney General)*, 2005 SCC 25, [2005] 1 S.C.R. 401, at paras. 53-56).

*B. Did the Trial Judge Err by Concluding that Dr. Johnston's Attempted Forceps Delivery Caused the Persistent Bradycardia?*

[30] It is undisputed that the persistent bradycardia that led to Cassidy's injury was caused by an obstruction of Cassidy's umbilical cord. The issue is whether the obstruction was caused by Dr. Johnston's forceps attempt or whether it arose independently of the procedure. Dr. Johnston submits that the obstruction arose independently of the procedure and thus the trial judge erred when she concluded that Dr. Johnston's failure to have back-up immediately available and failure to obtain informed consent were "but for" causes of Cassidy's injury.

[31] The trial judge concluded that it was more likely than not that Cassidy's umbilical cord became obstructed when it was compressed as a result of the forceps procedure. Dr. Johnston's argument against this conclusion tracks the Court of Appeal's reasons. According to the Court of Appeal, the evidence showed that "if Dr. Johnston's attempted forceps delivery had caused the cord compression, fetal bradycardia would have occurred almost

contemporaneously with the forceps procedure” (para. 86). This could not be reconciled with the trial judge’s finding that the bradycardia began “within at most one and two minutes” of the forceps attempt. In the Court of Appeal’s view, “[t]his was a critical finding of fact that had to be addressed by the trial judge” (para. 87).

[32] With respect, the trial judge did address the gap in time between the forceps attempt and the onset of the bradycardia. In particular, she considered testimony by Drs. Neal Shone and Duncan Farquharson that a physician’s attempt to position the forceps blades may displace the baby’s head such that the baby’s umbilical cord would become compressed upon a subsequent maternal contraction. This sequence of events accounts for the delay between the end of the failed forceps procedure and the onset of bradycardia. As the trial judge explained:

Dr. Shone explained the mechanics of potential cord compression in a rotational mid-forceps procedure. . . . [W]ith the second blade applied, the head must be manoeuvred, usually by twisting it out of the position in which it is lodged; that process creates space around the baby’s head, and the cord may become trapped around the side of the head or under the forceps blades.

Dr. Farquharson explained similarly that, for a rotational mid-

forceps procedure, a minor elevation or displacement of the baby's head from its position firmly fixed against the pelvis is necessary before the head can be rotated. He testified that if the umbilical cord is, for example, alongside the baby's cheeks or neck at the time of the minor elevation or displacement of the head, the cord may slip down into the space created, and the next labour contraction will compress the cord against the pelvis, causing umbilical obstruction. [paras. 125-126]

[33] Holmes J. expressly accepted this "displacement" theory as an explanation for how Cassidy's cord became obstructed. She recognized that this explanation was consistent with Dr. LeGresley's account of what had happened. Dr. LeGresley testified that Dr. Johnston applied both forceps blades, but abandoned the forceps procedure because he was unhappy with the placement of the second blade. This sequence of actions, the trial judge concluded, would have created the space necessary for the umbilical cord to be trapped and compressed.

[34] Furthermore, as Holmes J. observed, the "displacement" theory set forth by Drs. Shone and Farquharson, which is consistent with Dr. LeGresley's account of the facts, explains the gap in time between the forceps attempt and the cord compression. Holmes J. stated:

. . . some of the medical experts discussed or mentioned the effect of labour contractions, which occur periodically and may cause adjustment of the relative positioning within the birth canal. Thus, a displacement may not cause cord compression at the time, but a labour contraction afterwards may cause further movement that forces the cord into the space created earlier. [para. 132]

[35] Holmes J. thus addressed how the forceps attempt could have caused the umbilical cord obstruction notwithstanding the gap in time between the procedure and

the onset of bradycardia. With respect, the Court of Appeal was incorrect to find that Holmes J.’s findings were inconsistent.

[36] The Court of Appeal’s reasons also suggest that it understood the trial judge to have improperly relied on *Snell v. Farrell*, [1990] 2 S.C.R. 311, in order to draw an “inference of causation” (paras. 83-85). *Snell* stands for the proposition that the plaintiff in medical malpractice cases — as in any other case — assumes the burden of proving causation on a balance of the probabilities (*ibid.*, at pp. 329-30). Sopinka J. observed that this standard of proof does not require scientific certainty (*ibid.*, at p. 328); *Clements*, at para. 9. The trier of fact may, upon weighing the evidence, draw an inference against a defendant who does not introduce sufficient evidence contrary to that which supports the plaintiff’s theory of



causation. In determining whether the defendant has introduced sufficient evidence, the trier of fact should take into account the relative position of each party to adduce evidence (*Snell*, at p. 330).

[37] In the present case, there is no reason to believe that the trial judge failed to follow the approach described above. At trial, Dr. Johnston introduced some evidence contrary to the “displacement” theory of causation. Dr. Johnston testified that he never applied the second forceps blade to the baby’s head. This was inconsistent with Dr. Shone’s explanation of the “displacement” theory. According to Dr. Shone, it is the application of the second forceps blade that requires the baby’s head to be manoeuvred, creating the space necessary for the umbilical cord to become

trapped, such that it is later compressed by maternal contractions. Holmes J. acknowledged that Dr. Johnston’s testimony was inconsistent with the “displacement” theory. She explained, however, that she rejected Dr. Johnston’s testimony because he had a weak recollection of the facts and instead accepted Dr. LeGresley’s recollection that Dr. Johnston had applied both forceps blades before abandoning the procedure.

[38] Dr. Johnston also testified that, contrary to Drs. Shone’s and Farquharson’s “displacement” theory, applying both forceps blades would not create sufficient space for the umbilical cord to slip and

become trapped. He also adduced evidence of other possible causes of umbilical cord obstruction, including a short, kinked or nuchal cord (where the umbilical cord is wrapped around the baby's neck).

[39] Faced with this conflicting expert testimony on the feasibility of the "displacement" theory and evidence of other potential causes, it was incumbent upon Holmes J. to weigh the evidence before her and determine whether Cassidy had proven causation on a balance of the probabilities. Holmes J. ultimately concluded that Cassidy did satisfy this burden for three reasons. First, as already described, Drs. Shone's and Farquharson's testimony regarding the physical effects and distortions of labour contractions, as well as the timing of the steps leading up to a cord compression, were consistent with what occurred here. Second, multiple experts testified that mid-level forceps procedures are potentially dangerous and carry the risk of acute cord compression. Third, the close proximity in time of the forceps attempt

and the bradycardia supported the conclusion that the forceps attempt was connected to the cord compression. As a result, Holmes J. concluded that, although she could not be *certain* of the precise mechanics leading to cord compression, "[t]he only reasonable inference from all the evidence is that the mid-forceps

attempt likely caused the cord compression that in turn caused the bradycardia” (para. 135).

[40] There was no palpable and overriding error in this conclusion. It was open to Holmes J. to accept Drs. Shone’s and Farquharson’s testimony regarding the displacement theory over Dr. Johnston’s testimony. It was also open to her to conclude that the close proximity in time between the forceps attempt and the bradycardia, combined with the well-recognized risk of bradycardia associated with mid-level forceps deliveries, supported a finding of causation in this case.

*C. Did the Trial Judge Err by Concluding that Dr. Johnston’s Failure to Arrange for “Immediately Available” Surgical Back-up Caused Cassidy’s Injury?*

[41] As we have described, the trial judge found that Dr. Johnston failed to meet the standard of care applicable to mid-level forceps procedures because he failed to arrange for surgical back-up that would be immediately available to deliver Cassidy by C-section upon the onset of bradycardia. Dr. Johnston does not dispute that he breached the standard of care. He argues that the trial judge erred in finding causation because Cassidy failed to show that her injury would have been avoided if he had satisfied the standard of care. As we explain below, the trial judge did not err. She found

that the standard of care required Dr. Johnston to take reasonable precautions that would have been responsive to the recognized risk of bradycardia and the severe damage to the baby that results when bradycardia persists. The evidence shows that Dr. Johnston did not take such precautions and, in our view, the trial judge made no error in finding that Dr. Johnston's failure to have back-up immediately available caused Cassidy's injury.

[42] Although the ultimate issue before us is causation, the dispute here turns on a proper understanding of the "immediately available" standard of care set forth by the trial judge. Dr. Johnston's argument is straightforward. He argues that the standard of care contemplated by the trial judge required only that he ensure prior to the forceps procedure that the anaesthetist, Dr. Boldt, was not in another surgery and was instead standing by to assist in the event of bradycardia. Dr. Johnston concedes that had he delivered Cassidy within approximately ten minutes, her injury could have been completely avoided, but argues that Dr. Boldt's presence alone would not have made a difference in the time it took to deliver Cassidy. The delivery still would have taken 18 minutes from the onset of bradycardia and, thus, Cassidy's injury would not have been avoided. He supports his argument by pointing to evidence in the record indicating that it took

approximately 13 minutes to confirm the drop in Cassidy's fetal heart rate, move Mrs. Ediger to the operating room and get her ready for surgery. At that point, just as Mrs. Ediger was ready for surgery, Dr. Boldt arrived to anaesthetize her and Cassidy was born five minutes later. According to Dr. Johnston, there is no evidence that Cassidy would have been delivered faster if Dr.

Boldt had arrived earlier and, thus, Cassidy failed to establish that the failure to have Dr. Boldt standing by caused her injury.

[43] We accept Dr. Johnston's submission that the record does not establish that Cassidy would have been delivered faster had Dr. Boldt arrived earlier than he did. Accordingly, it would have been a palpable error for the trial judge to find that Dr. Boldt's initial absence, on its own, caused Cassidy's injury. But we do not think that this accurately represents the trial judge's finding.

[44] The problem with the standard of care, as interpreted by Dr. Johnston, is that it would be unresponsive to the risk in question and potential harm arising from it. Dr. Johnston reads the trial judge's reasons to say, in response to the risk of bradycardia, that he was required to have an anaesthetist standing by. At the same time, he submits that having an anaesthetist standing by would make no material difference in the ability to respond to bradycardia. As Dr. Johnston's counsel conceded at oral argument,

Dr. Johnston's interpretation of the "immediately available" standard of care would mean that the attending physician would *never* be liable for breaching the standard where fetal bradycardia results and leads to debilitating injury.

[45] We read the trial judge's reasons differently. Considering them in their context, and in light of the facts and evidence adduced in this case, we have no difficulty concluding that the trial judge contemplated a standard of care that would have been responsive to the recognized risk of fetal bradycardia associated with mid-

level forceps deliveries. That standard of care required Dr. Johnston to take reasonable precautions such that Cassidy could have been delivered without injury upon the occurrence of bradycardia. It did not allow him to disregard that risk, as he did here.

[46] The primary dispute at trial was whether the standard of care required a mid-level forceps attempt to be performed with a double setup. As indicated, the expert testimony at trial established that, with a double setup, the forceps procedure is performed in an operating room with an anaesthetist and operating room staff standing by and all of the materials prepped for use. If the forceps procedure fails, the mother's legs are lowered, her abdomen is

painted and the baby is delivered by C- section. In such circumstances, full delivery takes two to five minutes upon a failed forceps attempt.

[47] As Holmes J. recognized, the undisputed evidence at trial was that a baby begins to suffer injury approximately ten minutes from the onset of bradycardia. Dr. Alfonso Solimano, a specialist in neonatology, testified that if a baby is delivered before the ten-minute mark, the chances are very high that the baby will be born unharmed. It follows that with a double setup delivery, damage should be avoided.

[48] Despite the evidence presented at trial that all hospitals providing obstetrical care have the ability to provide double setups, and that such arrangements are commonplace for mid-level forceps deliveries, the trial judge rejected Cassidy's argument that the standard of care necessarily required a double setup. After giving consideration to the costs and risks involved, she found that the standard of care was more flexible, requiring only that surgical back-up be "immediately available", consistent with the guidelines of the Society of Obstetricians and Gynaecologists of Canada.

[49] Although it is more flexible in that it does not contemplate the two-to- five minute delay for delivery provided by a double setup, the "immediately available" standard of care endorsed by the trial

judge nonetheless requires that the attending physician take precautions that are responsive to the risk of persistent fetal bradycardia resulting from the mid-level forceps procedure. That the standard of care was tied to the risk and harm posed by the forceps procedure is evident from the trial judge's reasons. At the outset, for instance, the trial judge summarizes her reasons by stating: "Minutes mattered, and because of Dr. Johnston's failure to ensure that surgical back-up was reasonably available, the damage was done before Cassidy could be delivered by Caesarean section and resuscitated. Cassidy's claim in negligence is proven" (para. 9 (emphasis added)). Later, in assessing causation, the trial judge reiterated:

[M]inutes mattered, and with the passage of time Cassidy's bradycardia had done its damage. Had back-up been available even five to ten minutes more quickly, most — possibly even all — of Cassidy's injuries could have been avoided. Dr. Alfonso Solimano, specialist in neonatology, testified that, according to undisputed clinical opinion, injury begins in most cases at ten minutes from the onset of bradycardia; with delivery within ten minutes, chances are very high that the baby will be uninjured. [para. 138]

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The trial judge also recognized that although she did not find that the standard of care mandated a double setup, the fact that “a sizable portion of the relevant medical community” concluded that the double setup was required underscored the expectation that the reasonable practitioner take precautions to protect against injury (para. 91).

[50] We acknowledge that the trial judge at times referred to a duty to have surgical back-up immediately available and at other times referred to a duty to have inquired into the availability of the anaesthetist. But we must read the trial judge’s reasons in their full context. Doing so, we think the most logical reading of her reasons is that she considered the availability of an anaesthetist to be a component of the broader duty to have surgical back-up immediately available.

[51] It is beyond dispute that Dr. Johnston did not take precautions to ensure that, in the event of bradycardia, Cassidy could have been delivered by C-section without injury. As the trial judge observed, Dr. Johnston took “no steps” before beginning the mid-level forceps procedure to have surgical back-up immediately available even though there was no urgency that precluded him from doing so (para. 94). He did not even inquire into the availability of an anaesthetist. Indeed, Dr. Johnston’s argument

before this Court is centered on the premise that, given the arrangements in place at the time he undertook the mid-level forceps procedure, Cassidy could not have been delivered less than 18 minutes from the onset of

bradycardia, long after severe injury would have been all but guaranteed. That, as the trial judge found, fell below the standard of care.

[52] We do not suggest that a standard of care must prevent injury in all circumstances, at all costs. Here, we simply interpret and apply the standard of care determined by the trial judge, which was specific to the facts before the court.

[53] In sum, although Holmes J. did not find that the standard of care at the time of Cassidy's birth required Dr. Johnston to proceed with a double setup, she also did not find that the standard of care permitted Dr. Johnston to act in a manner that disregarded the recognized risk of bradycardia associated with a mid-level forceps rotation. Dr. Johnston was required, before he initiated the forceps procedure, to take reasonable precautions that would have been responsive to the recognized risk of bradycardia and the injury that results if bradycardia persists for more than 10 minutes. Because it is undisputed that Dr. Johnston failed to take these precautions, which would have resulted in a faster delivery and likely prevented

injury from bradycardia, the trial judge's causation finding is sound.

*D. Did the Trial Judge Err by Concluding that Dr. Johnston's Failure to Advise Mrs. Ediger of the Material Risks of a Mid-level Forceps Procedure Caused Cassidy's Injury?*

[54] Having upheld the trial judge's finding that Dr. Johnston's breach of the duty to have surgical back-up immediately available caused Cassidy's injury, we need not consider whether Dr. Johnston's breach of the duty to obtain Mrs. Ediger's

informed consent caused Cassidy's injury. As we will explain, however, the trial judge's informed consent analysis further confirms the implausibility of the "immediately available" standard advanced by Dr. Johnston.

[55] The trial judge concluded that Dr. Johnston had a duty to obtain Mrs. Ediger's informed consent before proceeding with the forceps delivery. As part of that duty, Dr. Johnston was required to inform Mrs. Ediger of the material risks associated with the procedure, including the risk of persistent bradycardia. These conclusions are not challenged before this Court.

[56] In analyzing whether the failure to obtain informed consent caused Cassidy's injury, the trial judge did not make a finding as to

whether Mrs. Ediger, properly advised of the risks, would have foregone the forceps delivery altogether in favour of a C-section. She acknowledged that there was conflicting evidence on this point. In particular, the evidence established that “Mrs. Ediger’s primary concerns throughout her pregnancy and delivery were for the health of her baby”, from which the trial judge had “no doubt” that “Mrs. Ediger would have undertaken a risk to herself in order to avoid a risk to the baby” (para. 166). In addition, there was some expert testimony that a prospective mother, properly advised of the risks, would opt for a C-section. However, Dr. Johnston testified that in his experience, patients advised of the risks would nevertheless opt for a forceps delivery.

[57] The trial judge found it unnecessary to decide whether Mrs. Ediger would have completely foregone the forceps delivery because she found that, at the very

least, Mrs. Ediger, properly informed that surgical back-up was not immediately available to delivery Cassidy in the event that complications arose, would have opted to wait until Dr. Johnston had arranged for such back-up.

[58] The trial judge’s approach to the informed consent question is incompatible with Dr. Johnston’s submission that his duty to have back-up surgical staff “immediately available” required him only

to confirm that an anaesthetist was present and unoccupied in the hospital, with no further precautions. As we have explained, under Dr. Johnston's version of the "immediately available" standard of care, it would not have been possible to deliver Cassidy in less than 18 to 20 minutes, thereby making severe brain damage a virtual certainty upon realization of the risk of bradycardia. If such injury were a virtual certainty, Dr. Johnston's duty to obtain informed consent would have included the duty to advise Mrs. Ediger that proceeding with the mid-level forceps delivery included the risk of bradycardia, and that in the event that that risk materialized, her baby would necessarily be born with severe and permanent brain damage because of the time required to arrange for surgical back-up. Alternatively, she could proceed with a C-section, which primarily poses risks to the mother. If Dr. Johnston were correct about the standard of care, we are confident that the trial judge – who recognized that Mrs. Ediger's "primary concern" was the health of her baby and found "no doubt" that "Mrs. Ediger would have undertaken a risk to herself in order to avoid a risk to the baby" (at para. 166) — would have concluded that Mrs. Ediger would have foregone the forceps delivery and opted instead for a C-

section. In that case, there would have been no mid-level forceps attempt, no resulting bradycardia, and no harm to Cassidy for that

reason.

[59] This rather obvious incompatibility between the “immediately available” standard of care advanced by Dr. Johnston and the trial judge’s actual reasons provides further support for rejecting Dr. Johnston’s conception of the “immediately available” standard.

#### IV. Conclusion

[60] In sum, the trial judge did not err by finding that Dr. Johnston’s failure to have surgical back-up immediately available before attempting the mid-level forceps procedure caused Cassidy’s injury. It follows that there is no basis for interfering with the finding of liability made by the trial judge.

[61] Because the Court of Appeal did not consider the parties’ appeal and cross-appeal on the trial judge’s damages award, the matter is remitted to the Court of Appeal to consider that issue.

[62] The appeal is allowed with costs to Cassidy throughout.

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*Appeal allowed with costs throughout.*

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