CITATION: Barker v. Montfort Hospital, 2007 ONCA 282

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COURT OF APPEAL FOR ONTARIO

WEILER, BLAIR and ROULEAU JJ.A.

B E T W E E N :	)	
	)	
ANDREA BARKER and DEREK STACK	)	**Marc J. Somerville, Q.C. and Daniel Boivin for the appellant Dr. H. Zihni Dervish**
	)	
Plaintiffs (Respondents)	)	
- and -	)	
	)	
MONTFORT HOSPITAL, DR. A. RAPPAPORT, DR. H. ZIHNI DERVISH, DR. BENOIT ST-JEAN, and JANE DOE, NURSES CHARGES WITH THE CARE OF THE PLAINTIFF ANDREA BARKER AND EMPLOYED BY THE MONTFORT HOSPITAL	)	**James McMahon for the respondents**
	)	
Defendants (Appellant)	)	
	)	**Heard: October 19, 2006**

On appeal from the judgment of Justice Michel Z. Charbonneau of the Superior Court of Justice dated January 10, 2006, with reasons reported at [2006] O.J. No. 39.

ROULEAU J.A.:

[1] The appellant was the respondent Andrea Barker's treating physician. The trial judge found that his care of Ms. Barker fell below the standard of care expected of a prudent and careful surgeon and that this breach caused her to lose five feet of small intestine for which he awarded damages in the amount of $129,745.62 plus pre-judgment

interest and costs. Ms. Barker's husband, Derek Stack, was awarded $10,000.00 plus pre-judgment interest for his claim under the *Family Law Act*, R.S.O. 1990 c.F.3.

[2] The appellant appeals on the ground that the trial judge erred in finding a breach of the standard of care and, in the alternative, erred in concluding that the breach caused the loss of the section of the small intestine. For the reasons that follow, I would allow the appeal on the alternative ground, set aside the judgment and dismiss the claim.

Preliminary Motion

[3] At the hearing of the appeal, the appellant brought a motion seeking permission to file a supplementary compendium containing the experts' reports that were served prior to trial but not filed as exhibits, as well as some correspondence. The appellant also sought to file a supplementary factum that dealt with the importance of considering these reports, as well as recent case law. The respondents opposed this motion and filed materials in support of their position.

[4] As is the practice in this court, we advised counsel to proceed with their submissions on the merits of the appeal and to address the issues raised by the motion and the materials sought to be filed as part of these submissions. We reserved judgment on the motion and on the appeal.

[5] With the exception of the request to file that portion of the supplementary factum dealing with recent case law, I would dismiss the motion. The experts' reports are of little assistance in this court's review of the trial decision as they were not filed at the trial and were therefore not considered by the trial judge. With respect to the exchange of correspondence, it addresses principally the availability of witnesses at trial and I consider it of no assistance to this court in resolving the issues on appeal. As to that portion of the supplementary factum dealing with recent case law, I see no difficulty in receiving this document as it is of assistance to the court and is not seriously objected to by the respondents.

[6] The respondents asked for costs of the motion. As the motion was largely unsuccessful, I would normally make such an order. In light of my proposed disposition of the appeal, I would not award the respondents costs, but rather take the costs of this motion into account in fixing the costs of the appeal.

Facts

[7] Ms. Barker had been followed for years for abdominal pain, the cause of which remained uncertain. At about 12:03 a.m. on April 4, 2000, she attended at the emergency department of the Montfort Hospital suffering from abdominal pain and vomiting. She was seen and then released at about 4:19 a.m. with a diagnosis of urinary tract infection.

[8] Ms. Barker returned to the emergency department that evening as her condition had worsened. She was x-rayed and diagnosed as having a partial bowel obstruction. The appellant, a general surgeon, was her treating physician. The treatment he adopted was to stop the intake of food, provide intravenous fluids, insert a nasogastric suction device and then observe the patient in the hope that the problem would resolve itself (referred to as conservative management). Expert testimony at trial confirmed that this was the appropriate treatment and that, in the large majority of cases, the problem would resolve itself without surgical intervention within twenty-four to forty-eight hours.

[9] Ms. Barker remained in hospital under observation until about 8:00 a.m. on the morning of April 6. At that time the appellant determined that Ms. Barker's condition had deteriorated to the point where she now suffered from peritonitis.[1]

[10] Ms. Barker was then processed for surgery and, due in part to delays in securing the necessary consent from her spouse, the operation did not occur until about 1:00 p.m. on April 6. Upon operating, the appellant saw that Ms. Barker had a volvulus, an abnormal twisting of the small bowel. This volvulus had cut off the blood supply to a five-foot section of the bowel. As a result, this section of the bowel had died and become gangrenous and had to be removed.

[11] Unfortunately, the reconnection of the bowel after the removal of the dead portion was not completely successful and, on April 19, Ms. Barker had to undergo a second surgery to repair a small hole at the site of the reconnection. Ms. Barker remained at Montfort Hospital for several days more during which time she lost weight and her general health deteriorated. At her request she was transferred to another hospital on April 29. After a long period of recuperation, she has recovered except that as a result of having lost a significant portion of her bowel she now suffers from small bowel syndrome.

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[1] [1] Peritonitis is an inflammation of the abdominal lining. It is very painful and is indicated by rebound tenderness and guarding. There are different types of peritonitis. Primary acute peritonitis, which is rare, is usually caused by blood-borne infection. Secondary acute peritonitis is usually caused by perforations of the gastro-intestinal tract. Therefore, in the case of a bowel obstruction, a perforation of any part of the intestinal tract could lead to peritonitis.

[12] Only the appellant's actions from April 4 to April 6 are in issue on this appeal (i.e. the time leading up to and including the first surgery). The following is a chronology of the key events from Ms. Barker's initial attendance at the emergency department on April 4 until her operation on April 6.

Date	**Time**	**Event**
Tuesday, April 4, 2000	12:03 a.m.	Ms. Barker attends the emergency room at Montfort Hospital.
	2:00 a.m.	Dr. Rappaport diagnoses Ms. Barker with a urinary tract infection.
	4:19 a.m.	Dr. Rappaport sends Ms. Barker home.
	7:40 p.m.	Ms. Barker attends the emergency room for a second time.
	9:50 p.m.	Dr. Lockman examines Ms. Barker. She is diagnosed with a bowel obstruction.
	Approx. 11:00 p.m.	Dr. Lockman calls the appellant at 11:15 p.m. and the appellant gives the direction to admit Ms. Barker to the hospital. Conservative measures are instituted.
Wednesday, April 5, 2000	Morning	The appellant observes Ms. Barker in person for the first time.
	8:50 p.m.	A nurse notes that Ms. Barker is complaining of pain under her rib cage. The nurse calls and advises the appellant.
	9:00 p.m.	A nurse tests Ms. Barker's electrolytes.
	9:30 p.m.	A nurse calls the appellant with the results of Ms. Barker's electrolytes and Foley output.
	11:00 p.m.	A nurse notes that Ms. Barker states that the pain under her rib cage is less intense. The nurse observes that her abdomen is very sensitive to touch, is firm to touch and is moderately distended. The nurse calls the appellant and advises him of the change in the abdomen and the Foley output.
Thursday, April 6, 2000	8:00 a.m.	Ms. Barker is taken to have an x-ray.
	approx. 8:30 a.m. or 8:45 a.m.	The appellant examines Ms. Barker in person. He observes peritonitis and indicates that surgery is necessary.

	11:00 a.m.	The appellant and Dr. Killorn visit Ms. Barker.
	11:50 a.m.	The consent for surgery is signed.
	12:15 p.m.	Ms. Barker goes to the operating room.
	1:00 p.m.– 3:23 p.m.	Surgery is performed on Ms. Barker. Anesthesia commences at 1:00 p.m.; the surgery starts at 1:30 p.m.; the procedure ends at 3:08 p.m.; and Ms. Barker leaves the operating room at 3:23 p.m.

[13] The trial judge found that the appellant had not met the appropriate standard of care. This finding was based largely on nurses' notes from the evening of April 5, contained in the hospital records. According to the trial judge, these notes indicated that Ms. Barker's condition had been deteriorating throughout the evening of April 5 and that the appellant had been called three times and informed of the situation. The trial judge concluded that the appellant should have attended to assess Ms. Barker's condition that evening rather than wait until 8:00 a.m. the following morning. Had the appellant attended at the hospital, he would or should have found that her condition had in fact deteriorated to the point where an immediate operation was necessary. Had he operated that evening rather than at 1.00 p.m. the following day, it was more probable than not that the volvulus would have been discovered sooner and the five-foot section of bowel would have been saved. This is because, according to the trial judge, the volvulus had cut off the blood supply to that section of the bowel during the evening of April 5 and according to expert testimony, the bowel takes approximately eight hours to die after the blood supply to it has been cut off. By operating that evening, the volvulus would have been discovered and corrected before any permanent injury was suffered.

Issues on appeal

[14] The appellant advances two broad grounds of appeal:

(1) the trial judge erred in finding a breach of the standard of care; and

(2) the trial judge erred in concluding that the appellant's negligence caused Ms. Barker to lose a portion of her small bowel.

Analysis

1) The trial judge erred in finding a breach of the standard of care

[15] The appellant argues that the respondents' theory of liability, as appears from the pleadings, was that Ms. Barker ought to have been operated on either at the time of her first visit to emergency early on the morning of April 4 or alternatively, early on April 5, after she returned to the emergency department and had been admitted to hospital with a

diagnosis of a partially obstructed bowel. The respondents' expert reports and the evidence they led at trial were directed at supporting this theory of liability.

[16] The appellant maintains that his defence was directed at refuting these theories. Having rejected both of these theories of liability, the trial judge ought to have dismissed the claim. Instead, the trial judge found that the appellant was negligent in not operating late in the evening of April 5. This allegation had not been made by the respondents at trial and was never addressed in the evidence or by the experts. The appellant submits that there was neither an evidentiary basis nor expert opinion evidence in support of such a theory of liability. Because this theory had not been pleaded, the appellant maintains that he was never provided with an opportunity to respond to it. The trial judge's finding of negligence should, therefore, be set aside.

[17] I would not give effect to this ground of appeal.

a) Pleadings

[18] From the pleadings, it is clear that the whole period during which Ms. Barker was under the appellant's care was in issue. The claim focused specifically on the period running from the morning of April 5 to the morning of April 6. The statement of claim alleged that the appellant "failed to act with any diligence in the assessment and treatment of [Ms. Barker], as he did not order a second series of x-rays or take any action of any consequence until a full day following (i.e. April 6) his assuming responsibility of her care. [Ms. Barker] states that this refusal to act was in spite of insistences by [Ms. Barker's spouse] that her condition was rapidly deteriorating and clearly required more investigation and/or surgery."

[19] At trial the respondents argued that the operation ought to have occurred on April 4 or the morning of April 5 at the latest. The appellant's submissions were to the effect that his treatment of Ms. Barker was appropriate and that it was appropriate to delay the operation until the early afternoon of April 6.

[20] Although the respondents focused on the earliest possible time of intervention, i.e., the evening of April 4 and morning of April 5, the respondents' theory of the case was nonetheless that the appellant had not properly responded to the signs that Ms. Barker's condition was deteriorating and that surgery ought to have been undertaken well before 1:00 p.m. on April 6. This theory of the respondents' case was well understood. The trial judge's finding that the operation ought to have been carried out in the evening of April 5 is, therefore, not a totally new theory of liability.

[21] In my view, the present case is quite different from the cases of *Rodaro v. Royal Bank of Canada* (2002), 59 O.R. (3d) 74 (C.A.), *Grass (Litigation Guardian of) v. Women's College Hospital* (2005), 75 O.R. (3d) 85 (C.A.) and *TSP-Intl Ltd. v. Mills*

(2006), 212 O.A.C. 66 (C.A.). In those cases the theory on which the trial judge's finding of liability was based had not been pleaded or advanced in the course of the trial. In the present case the theory of liability had always been that the appellant delayed treatment and, specifically, delayed operating on Ms. Barker until it was too late. The parties each suggested different times as being the proper time to operate and the trial judge chose a time in between the two.

[22] Further, the appellant cannot be said to have been taken by surprise by the respondents' failure to specifically point to the evening of April 5 as being the time at which the operation ought to have been carried out. In the examination in chief of the appellant, he was asked by his counsel: "Now, it might be suggested in this action that you should have considered surgery on that day, on April 5th. What do you respond to these allegations?" The appellant, therefore, understood that the respondents were suggesting that the whole of April 5 was in issue.

b) Factual basis for the trial judge's finding

[23] The appellant also objects to the use made by the trial judge of the hospital records. The records contained notes made by nurses and the appellant in the course of the evening of April 5 and the morning of April 6. The relevant notes are set out in appendix 1 to these reasons.

[24] Based on these notes, the trial judge found as follows:

> [60] As indicated, the evidence clearly indicates that the patient's condition deteriorated all through the evening of April 5 and the early morning hours of April 6. The nurse on duty was sufficiently concerned to call Dr. Dervish at 9:00 p.m. about a pain under the rib cage. She took the patient's electrolytes and called Dr. Dervish back with the results at 9:30. A little later on, the nurse examined the patient's abdomen and her notes indicate "states pain under the rib cage less intense now abdomen very sensitive to touch especially lower abd. – firm to touch and moderately distended. Dr. Dervish called and advised of Foley output and change in abdomen".
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> [61] At 23:15, Ms. Barker complained of pain localized in lower abdomen radiating to lower back. She was given Demerol and Gravol. An observation by the nurse at 12:30 a.m. describes the abdomen as follows: "bas abdomen distendu et ferme et abdomen sensible à la grandeur Ø péristaltisme perçu à l'oscultation".

> [62] From this evidence alone, it is difficult for the court to evaluate the degree of deterioration. However, the only reasonable inference from the evidence is that the nurse took upon herself to call Dr. Dervish because she made significant observations in her condition and was sufficiently concerned to call the surgeon.
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> [63] What leads me to conclude definitely that Ms. Barker's condition deteriorated starting in the evening of April 5, and that Dr. Dervish was aware of this is Dr. Dervish's own note made on the morning of April 6, 2000 (at B63 Exhibit 3) where he writes "worsening condition since last night". He had not seen the patient since mid-day of the previous day and all his information on the patient's progress came from the various nurses who cared for Ms. Barker since then.

[25] The notes were part of the complete set of hospital records of Ms. Barker's stay at Montfort Hospital, which was filed and made an exhibit in the action. The appellant maintains that the notes could not be used by the trial judge to base a finding of negligence for the following reasons:

> (a) Although the records were entered on consent, the appellant had reserved the right to challenge their accuracy and would likely have done so with respect to these notes had he been told they might be relied on by the trial judge;
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> (b) they contained opinions and could not be relied on unless the nurses who made the notes were called as witnesses;
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> (c) the notes were never put to the appellant to obtain his comments. He was never asked to confirm that they accurately reflected information that was conveyed to him that night nor was he asked why he did not attend at the hospital as a result of receiving this information; and
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> (d) the notes were not referred to throughout the trial, nor were they commented upon by the experts. The trial judge appears to have interpreted these notes based exclusively on his personal review of them drawing inferences and conclusions that could only be made with the assistance of experts and after receiving submissions from counsel.

[26] The appellant therefore submits that the trial judge erred in using these notes to base his finding of negligence. On this record, the trial judge was in no position to

interpret these notes as demonstrating a worsening in Ms. Barker's condition so as to warrant the appellant's attendance at the hospital that evening.

[27] In my view, the notes recorded observations made by the nurses and were admitted and relied upon by the trial judge as business records pursuant to s. 35 of the *Evidence Act*, R.S.O. 1990, c.E.23.[2] They were properly before the court and were clearly relevant as they related to a critical period of Ms. Barker's care. Neither party chose to call the nurses who made the notes nor did they seek to challenge their accuracy. Further, the trial judge did not rely exclusively on the notes to make his finding that Ms. Barker's condition had deteriorated during the evening of April 5. First, the trial judge's finding is supported by the note made by the appellant in the hospital record on the morning of April 6. The appellant observed "worsening condition since last night," suggesting that he interpreted the nurses' notes in the same way as the trial judge. As explained by Dr. Latulippe, the appellant's expert, in community hospitals such as the Montfort, when doctors are away from the hospital they rely on the hospital's nurses to monitor their patients and advise them of changes.

[28] Second, the trial judge had the benefit of expert evidence as to the science of bowel obstructions and the process of conservative management or watchful waiting during which the patient is observed for symptoms of possible complications. This evidence assisted the trial judge in making his findings of fact based on his interpretation of the hospital records.

[29] Third, the trial judge was entitled to consider the overall context and circumstances including the fact that the nurses made three telephone calls to the appellant that evening – the third occurring sometime after 11:00 p.m. In addition, it is of some significance that, by the evening of April 5, approximately forty-eight hours had elapsed since Ms. Barker's first attendance at the hospital emergency department and over twenty-four hours since her admission following her second attendance.

[30] In my view, therefore, it was open to the trial judge to conclude that, during the evening of April 5, there had been a deterioration in Ms. Barker's condition.

[31] The appellant also objects to the use the trial judge made of this finding. The appellant correctly observes that none of the experts was specifically asked to address the nurses' notes or asked whether the appellant's failure to attend at the hospital that evening breached the standard of care. However, the trial judge properly considered the expert evidence to determine the appropriate standard of care and then simply applied this standard to the findings of fact he made.

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[2] See also *Ares v. Venner*, [1970] S.C.R. 608.

[32] The expert evidence was to the effect that watchful waiting was the appropriate treatment for the respondent's condition but that watchful waiting should end and surgery should be performed if the patient's condition deteriorates or, if after a certain period of careful observation, there is no improvement in the patient's condition. Further, surgery should be immediately performed at the first signs of peritonitis, namely rebound tenderness and rigidity or guarding.

[33] The trial judge canvassed the expert evidence and, based on it, determined the appropriate standard of care. It is against this standard of care that he considered the appellant's conduct. The trial judge found:

> [The appellant] was not keenly aware that the standard of care required him to operate as soon as the patient's condition worsened. Nowhere in his evidence does he appear to have been focusing on the possibility, although rare, that a volvulus could be at play and that a close observation was also required for that purpose… Nowhere in [the appellant's] evidence does he indicate that he felt he was obliged to proceed with surgery if Ms. Barker's condition worsened... His approach appeared to be to wait, possibly for up to four days. Surgery would be required only after no improvement for four (4) days or immediately upon finding signs of peritonitis.

[34] On this record, the trial judge was entitled to find as a fact that Ms. Barker's condition had deteriorated during the evening of April 5, that the standard of care was that such deterioration meant that Ms. Barker should be operated on and that because this was not done the appellant breached the applicable standard of care. These findings are entitled to deference in this court. I would therefore not give effect to the first ground of appeal.

2) The trial judge erred in concluding that the appellant's negligence caused the respondent to lose a portion of her small bowel

[35] The appellant submits that the trial judge erred in finding that Ms. Barker's loss of a section of her bowel was caused by the appellant's negligence. There was, the appellant argues, no expert or other evidence on which the trial judge could base his finding that if the appellant had attended at the hospital late in the evening of April 5 and had decided to operate, the section of the bowel would likely not have had to be removed. For the reasons that follow, I agree.

(a) The trial judge's findings on causation

[36] The trial judge found that "upon receiving phone calls [from] the nurses, [the appellant] should have attended at the hospital and if his examination confirmed that the condition of the patient had in fact deteriorated, as I find it had, he should have proceeded there and then with the surgery." There is no basis for interfering with this finding.

[37] Having made this finding, however, the trial judge then addressed the issue of causation. As it is central to this appeal, the relevant portion of his reasons is set out in full:

> By the time her condition started deteriorating, at 9:00 p.m. on April 5, less than 24 hours had elapsed since the initiation of the conservative measures. Surgery should not have been delayed further. Unfortunately, surgery was carried out only over 15 hours after that critical time. There is ample evidence, which I accept, that a volvulus evolves progressively. It is fair to conclude that a volvulus will only progress to a state where the bowel is completely strangulated over a period of time. Dr. Axler, a specialist in the field, testified that a volvulus would usually proceed through stages. First, a partial twisting, then to a full twist or more as the case may be. Complete strangulation of the bowel will only come with time. It is only at that point that the biological clock will start. The evidence of Dr. Latulippe is that the biological clock is 8 hours. I find that the volvulus only started to develop during the evening of April 4. At approximately 11:00 p.m. on April 4, conservative measures generally relieving pressure on the bowel were instituted. I find that the volvulus evolved to a full strangulation during the evening of April 5. I conclude that it is more likely than not that surgery at 11:00 p.m., or thereabouts, on April 5 would have been in time to save [Ms. Barker's] bowel. I also find that waiting an additional 14 hours in the circumstances curtailed any chance of saving the bowel because it is more likely than not that the biological clock had expired during that time. I therefore conclude that [the appellant's] breach more probably than not caused [Ms. Barker's] loss of over five feet of small intestine, ultimately caused [Ms. Barker's] short bowel syndrome with which she will be afflicted for life and greatly increased her period of recovery.

[38] Although the basis for the trial judge's finding that "the volvulus evolved to a full strangulation during the evening of April 5" is not clear, it appears that he relied on the

fact that Ms. Barker's condition deteriorated during that time, as observed by the nurses between 8:50 p.m. and 11:15 p.m. on April 5.[3] The trial judge then reasoned that if the appellant had attended the hospital that evening and had decided to operate on Ms. Barker, the operation would have been carried out before the eight-hour biological clock had run.[4]

[39] Although I have found that the trial judge was entitled to conclude that the observations made by the nurses in the evening of April 5 were signs of the type of deterioration that warranted ending the watchful waiting period, there was no basis for concluding that these observations of deterioration established, on a balance of probabilities, that full strangulation of Ms. Barker's bowel occurred during this period and that surgery at that point would have saved the section of the bowel. The expert testimony was to the effect that a volvulus could not be diagnosed before surgery. The experts did not give evidence as to the clinical signs or specific symptoms of a full volvulus. There was no evidence outlining what the trial judge characterized as the progress to full strangulation. This concept of the volvulus progressing in this way was not explored with Dr. Latulippe and only touched on by Dr. Axler, the respondents' expert. There was no evidence explaining what, if anything, can be observed as a volvulus develops to full strangulation.

[40] The observations made by the nurses on the evening of April 5 were not put to the experts nor were the experts asked whether observations of this kind signalled or were consistent with the formation of a full volvulus. Quite to the contrary, Dr. Axler was of the view that compromise to the bowel had likely occurred several days before the operation and by the time of surgery the bowel had been dead for several days.[5] This view is in accord with Dr. Latulippe's testimony that, in hindsight, the volvulus[6] was probably present in the morning of April 5. I take that statement to mean that, in his view, the portion of the bowel would likely have died that afternoon, some six to eight hours later. Dr. Latulippe's and Dr. Axler's evidence to the effect that the bowel likely died before or during the afternoon of April 5 is also consistent with the expert evidence that, after the bowel dies, the patient's condition worsens and peritonitis develops. Although the record does not indicate how soon after the death of the bowel symptoms of peritonitis appear[7], the observations made during the evening of April 5 and morning of

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[3] These observations are set out in appendix 1 to this judgment.

[4] The evidence before the trial judge was that a section of bowel dies about eight hours after its blood supply is cut off by a volvulus.

[5] In cross-examination, he qualified the statement as meaning more than one day.

[6] Dr. Latulippe always refers simply to a volvulus and never uses the expression "full volvulus." In describing what a volvulus is, he said that "le volvulus devient clinique lorsque l'anse, en se [basculant] vient écraser l'anse qui amène le transit intestinal puis vient l'écraser, donc, crée une occlusion."

[7] Once the bowel dies, it will engender an inflammatory reaction leading to the appearance of fibrin and liquid in the abdominal cavity. As the necrotic bowel deteriorates further, it can lead to the contents of the bowel leaking into the abdomen. These are the causes of the peritonitis.

April 6 are consistent with the bowel having died sometime during the afternoon of April 5. The worsening in Ms. Barker's condition noted by the nursing staff in the course of the evening of April 5 might well be caused by the deteriorating condition of the dead section of bowel and indicate the onset of peritonitis.

[41] In conclusion, on this point, there is no evidence on which to base a finding that the volvulus developed to full strangulation during the evening of April 5. To the limited extent that the experts addressed the issue, that evidence is more consistent with a finding that the full volvulus was in place well before then. In my view, the trial judge, having found negligence on the part of the appellant, simply inferred that it was the delay in carrying out the operation that caused the death of the section of bowel. There was no medical or other evidentiary basis, however, for making such an inference.

(b) Causation on this record

[42] Having rejected the basis on which the trial judge appears to have relied to conclude that full strangulation of the bowel occurred during the evening of April 5, I must nonetheless consider whether, on this record, there is another basis to reach the conclusion that, but for the negligence of the appellant, the bowel would have been salvageable. A convenient starting point is to estimate when the operation would likely have occurred had the appellant not been negligent and had he attended at the hospital in the evening of April 5 as a result of the calls he received from the nurses.

[43] The trial judge found that the operation would have occurred at 11:00 p.m. on April 5 but for the appellant's negligence. He did not explain how he arrived at the conclusion that the operation would have occurred at this precise time. The record reveals that the last of the three calls made by the nurses during the evening of April 5, the one in which the appellant was advised of the change in Ms. Barker's abdomen, was at 11:00 p.m. The note describes the nurse's observation as "pain under rib cage less intense now. Abdomen very sensitive to touch especially lower abdomen – firm to touch and moderately distended". This appears to be the point at which the trial judge found that the appellant ought to have decided to attend at the hospital. Clearly, as the appellant was not yet at the hospital, the operation could not have occurred at that time. There was no evidence as to how long the appellant would reasonably have taken to attend at the hospital and examine the patient. Nor was there evidence of how long it would have taken to obtain the necessary consents and assemble the staff required to carry out the operation.

[44] In the absence of evidence as to when the operation could have been carried out, I will use as a guide the time it took Ms. Barker to reach surgery after the appellant decided to operate on the morning of April 6. We know that the appellant determined to carry out the surgery at about 8:30 a.m. on April 6, but that the operation did not proceed for several hours because of necessary delays and Ms. Barker's spouse's delay in providing

the necessary consent. In fact, it was 1:30 p.m. when the surgery commenced. The volvulus was then observed and correction became possible. In other words, it took approximately five hours from the point where the decision to operate was made to the point where the volvulus could have been corrected.

[45] Applying the same five hour delay and allowing for approximately one hour for the appellant to attend at the hospital and examine Ms. Barker after the 11:00 p.m. call, but for the appellant's breach of the standard of care, it is likely that the bowel would have been observed in surgery at approximately 5:00 a.m. on April 6. Whether I assume that the operation would have been carried out at 5:00 a.m. on April 6 or accept the trial judge's finding that it could have been carried out at 11:00 p.m. on April 5, immediately after the appellant received the call from the nurse advising him of the change in Ms. Barker's abdomen, the result is the same. On this record there is simply no basis for finding that on a balance of probabilities, the section of the bowel died after 11:00 p.m. on April 5.

[46] In order to conclude that the appellant's negligence caused the loss, the respondents had to prove that but for this negligence, the bowel could have been saved on a balance of probabilities. Assuming that the trial judge's finding that the operation could have been carried out at 11:00 p.m. on April 5 was correct, this could be done directly by leading expert evidence that, based on a review of the records, including the pathology report on the portion of the bowel that was removed, the bowel had likely been necrotic for less than fourteen and a half hours when it was removed by the appellant at 1:30 p.m. on April 6. This would mean that if the appellant had not been negligent and the operation had been carried out at about 11:00 p.m. on April 5 rather than 1:30 p.m. on April 6, the bowel would likely have been saved.

[47] However, no expert was asked for an opinion as to whether the section of the bowel, when removed, had been necrotic for less than fourteen and a half hours. This is likely due to the fact that the position advanced by the respondents at trial was that the operation ought to have occurred much sooner, either on April 4 or early on April 5, at which time causation would have been much less of an issue. From the appellant's perspective, he maintained that there had been no negligence and that the operation was carried out at the appropriate time. On this theory, there was no issue as to causation.

[48] In the absence of direct evidence as to the time at which the bowel likely died, causation could have been established indirectly by proving when the full volvulus likely formed and assuming that the bowel would have died approximately eight hours later.

[49] As I outlined earlier in these reasons, there is, in my view, no way of determining on this record whether the volvulus was formed on April 3, 4, or 5. The evidence, therefore, does not establish that it is more likely than not that the bowel would have been alive and salvageable at the time surgery ought to have been performed. In the absence

of evidence as to when, within the April 3 to 5 timeframe, the volvulus formed, I conclude that the respondents have done no more than show that surgery carried out some eight to fourteen hours earlier would have afforded Ms. Barker a chance of avoiding the injury. This does not satisfy the requirement of showing that an earlier surgery would, more likely than not, have avoided the injury (see *Cottrelle v. Gerrard* (2003), 67 O.R. (3d) 737 (C.A.)).

[50] There is, therefore, no basis for finding that on a balance of probabilities, but for the appellant's negligence, Ms. Barker would not have lost a five-foot portion of her small bowel.

(c) Consideration of the recent decision of *Resurfice Corp. v. Hanke*

[51] Subsequent to the hearing of this appeal, the Supreme Court of Canada released its decision in *Resurfice v. Hanke*, (2007) S.C.C. 7**.** As set out by the Chief Justice in her reasons at para. 20, this decision simply asserted "the general principles that emerge[d] from the cases." It did not alter the state of the law on causation. Rather it confirmed that "the basic test for determining causation remains the 'but for' test" (para. 21). The Chief Justice, reaffirming the view expressed by Sopinka J. in *Snell v. Farrell*, [1990] 2 S.C.R. 311 at 327, stated at para. 23 as follows:

> The "but for" test recognizes that compensation for negligent conduct should only be made "where substantial connection between the injury and defendant's conduct" is present. It ensures that a defendant will not be held liable for the plaintiff's injuries where they "may very well be due to factors unconnected to the defendant and not the fault of anyone." [Citation omitted.]

[52] The court continued at paras. 24 and 25:

> [I]n special circumstances, the law has recognized exceptions to the basic "but for" test, and applied a "material contribution" test. Broadly speaking, the cases in which the "material contribution" test is properly applied involve two requirements.
>
> First, it must be impossible for the plaintiff to prove that the defendant's negligence caused the plaintiff's injury using the "but for" test. The impossibility must be due to factors that are outside of the plaintiff's control; for example, current limits of scientific knowledge.

[53] In the present case, the respondents' have not shown that it was impossible to prove that the delay in carrying out the operation caused Ms. Barker's injury on a balance of probabilities. As I noted earlier, none of the experts was specifically asked to consider the pathology report on the removed portion of the bowel and other evidence to give an opinion on the impact of operating at 1:30 p.m. on April 6 rather than at 11:00 p.m. on April 5 (or within several hours thereafter) nor were they asked whether such an opinion could be given. That said, the evidence that was led and that generally addressed the point at which the bowel likely died was unfavourable to the respondents. The respondents' expert, Dr. Axler, testified that the section of the bowel had likely been dead for several days leaving little doubt as to what his opinion on causation would have been if asked whether the bowel could have been saved if the operation had been carried out some eight to fourteen hours earlier that it was. The appellant's expert, Dr. Latulippe, expressed the view that, in hindsight, he believed the volvulus was likely present on the morning of April 5, suggesting that he also would have opined that an operation carried out after 11:00 p.m. on April 5 would not likely have saved the portion of the bowel.

[54] In my view, therefore, the material contribution test has no application to the present case. We are left, therefore, with the "but for" test. As noted above, no expert opined on causation based on an eight to fourteen hour negligent delay in operating. Assuming that a positive medical opinion could not have been obtained in this case, the "but for" test allows for the application of the robust and pragmatic approach: see *Snell v. Farrell*, *supra*, at para. 44. Under that approach the respondents nonetheless have to provide an evidentiary foundation for finding that there is a substantial connection between the injury and the defendant's conduct. As I have noted in the earlier portion of this decision, no such foundation was laid in the present case. There is a complete absence of medical or other evidence from which to infer that, but for the delay in operating, the section of the bowel would likely have been saved.

(d) Did the delay in treatment increase the extent of Ms. Barker's loss of bowel?

[55] I have had the benefit of reading the reasons of my colleague Weiler J.A. and there is one aspect of her reasons that I feel I should address. She has expressed the view that the delay in operating on Ms. Barker aggravated her condition and increased the extent of Ms. Barker's loss of bowel. I do not share her understanding of the evidence on this point.

[56] My understanding is that once the volvulus interrupts the flow of blood to a portion of the bowel, that whole section dies within six to eight hours. As set out by Dr. Latulippe, "il est certain qu'une anse intestinale privée de sang, au bout de huit heures elle va être morte de façon irréversible." The quotations from Dr. Latulippe in Weiler J.A.'s reasons are of Dr. Latulippe describing the various degrees of severity of peritonitis. As I read that testimony, he was describing that, as time passes, the already necrotic bowel tissue deteriorates and the inflammation increases until, at one point, the

bowel would be openly perforated and the contents would spread to the abdominal cavity. He was not, as I read this evidence, suggesting that, as time passed, more and more bowel would become necrotic.

[57] The evidence of Dr. Dubinsky referred to by Weiler J.A. was that, after a volvulus forms and a portion of the bowel deprived of blood dies, there can be swelling and, as a consequence, there can be "decreased blood supply to areas of the bowel that aren't twisted but simply being deprived of their blood supply, they too may die, and so the length of bowel that's resected may get extended, if you will, in terms of the length of the bowel that needs to be resected." Here, Dr. Dubinsky was simply describing potential complications. He was not suggesting that, in Ms. Barker's case, any portion of the bowel beyond the section impaired by the volvulus had become necrotic and had to be removed.

[58] In fact, as appears from the operative report, only the portion of the bowel deprived of blood as a result of the volvulus was removed and "the bowel was then resected at the point of tortion." This was confirmed by Dr. Latulippe when commenting on the resection in the present case, he said, "je pense que, après une résection de cet ordre, surtout pour un volvulus où le point est clair, la transition est franche, si le docteur Dervish avait eu un doute sur un 5 centimètres supplémentaires, il aurait été aisé d'aller le chercher. "

[59] In my view, therefore, the evidence does not support a finding that the negligent delay in operating caused the loss of any additional bowel.

Conclusion

[60] For these reasons, I would allow the appeal, set aside the judgment and dismiss the claim. The appellant is entitled to his costs in this court and at trial, if demanded, on a partial indemnity scale. The costs in this court, taking into account the costs of the appellant's largely unsuccessful motion, are fixed at $30,000 inclusive of GST and disbursements. If the costs of the trial are demanded and cannot be agreed upon, they are to be assessed.

"Paul Rouleau J.A."
"I agree R.A. Blair J.A."

WEILER J.A. (Dissenting):

[61] I have had the benefit of reading the reasons of Rouleau J.A. I agree with his disposition of the issues raised on this appeal, with the exception of the issue of causation.

[62] Simply put, the appellant, Dr. Dervish, asserts that if he was negligent, his negligence did not cause or contribute to the loss of a portion of the respondent's bowel. The appellant submits that, as no doctor testified that an operation would more probably than not have saved the respondent's bowel when her condition worsened at approximately 9 p.m. on April 5, 2005, there is no evidence to support the trial judge's conclusion that he is responsible for her condition, namely, short bowel syndrome.

[63] My answer to these submissions is that a positive medical opinion as to causation is not essential to a finding on this issue. Considering the cumulative effect of all of the circumstances, including the medical evidence, a trial judge is entitled to draw a common sense inference: *Snell v. Farrell*, [1990] 2 S.C.R. 311 at para. 44. That is what the trial judge did here and his conclusion is entitled to deference.

[64] Ms. Barker had a history of medical problems for which she had received treatment. At the time she was admitted to hospital around midnight on April 4, x-rays showed a partial bowel obstruction. The opinion of the doctors was that the most likely cause of the partial obstruction was adhesions or scarring from her prior medical treatment. A period of watchful waiting was initiated to determine if this was indeed the cause of the partial obstruction. The trial judge accepted the evidence of Dr. Latulippe, the appellant's expert, that the period of watchful waiting could vary between 24 to 48 hours if the patient's condition remains stable. Dr. Latulippe further testified that when the condition of a patient undergoing this conservative treatment worsens it is indicative that the condition will not resolve itself, meaning that conservative measures have failed. Surgery is required as soon as is practicable.

[65] My colleague holds that the deterioration of the respondent's condition warranted ending the period of watchful waiting but he does not say why. Indeed, he says that the deterioration of the respondent's condition provides no basis for concluding that her bowel was being strangled as a result of the existence of a volvulus (a looping of the bowel on itself) or that infection from a necrotic bowel was spreading. In part, his conclusion is based on the medical evidence that a volvulus cannot be diagnosed before surgery.

[66] Dr. Latulippe testified that although there are no reliable signs or examinations that permit detection of a volvulus with certainty prior to surgery, if the patient's condition deteriorates during the period of watchful waiting, suspicions about the cause would exist. According to Dr. Latulippe, because it is very difficult to determine

clinically when the strangulation of the bowel occurs, reliance is placed on minute, or detailed, observation of the patient to detect what is taking place biologically.

[67] The trial judge accepted the evidence of Dr. Latulippe, which he quoted at para. 55 of his reasons:

> Mais le problème entre la biologie et la clinique est qu'il est très difficile cliniquement d'évaluer quand l'artère et la veine viennent ligaturer. Il n'y a pas de façon prècise de la déterminer. Alors, on se fie sur notre période d'observation minutieuse …

[68] The trial judge further held, at para. 64 of his reasons, that the surgeon in charge of the careful watch must be attuned to the possibility that the patient's bowel obstruction is due to the existence of a volvulus. The trial judge found that Dr. Dervish was not focussing on the possibility that a volvulus was causing the obstruction of the bowel and was not aware that the standard of care required him to operate as soon as the patient's condition worsened.

[69] Dr. Axler, the respondent's expert, testified that the reason for ending the period of watchful waiting when a patient's condition deteriorates is because a worsening condition is indicative that "whatever has caused the initial thing is getting worse" and also "…you're looking for peritonitis." Peritonitis is an inflammation of the lining of the abdomen. According to Dr. Axler, "…when the bowel is dead, you can then get leakage of contents. As the tissue dies, you get leakage of intestinal contents into the abdominal cavity and localized infection which can spread from there."

[70] The trial judge accepted the evidence of Dr. Latulippe generally and of Dr. Axler on this point. He indicated at para. 55 of his reasons that there are two reasons why it is important to proceed to surgery as soon as is practicable:

> First of all, if the obstruction is caused by a volvulus which causes interruption of blood flow to a portion of the bowel, that section of the bowel will die within 8 hours and therefore *only a close observation has a chance of discovering the volvulus and permitting a timely surgery; secondly, at the first signs of peritonitis, surgery must be immediately undertaken to prevent dangerous complications to the patient's health.* [Emphasis added.]

[71] My colleague states, at para. 40 of his reasons, that Dr. Axler and Dr. Latulippe were both of the opinion that compromise to the respondent's bowel as a result of the existence of a volvulus had likely occurred several days before the operation and that, by

the time of surgery, the bowel had been dead for several days. While that was Dr. Axler's opinion, the trial judge clearly rejected it. No palpable and overriding error has been shown respecting the trial judge's conclusion in this regard and the trial judge's finding is therefore entitled to deference on this point. I strongly disagree that Dr. Latulippe's opinion, that the volvulus was likely present on the morning of April 5, meant that the respondent's bowel would likely have died some six to eight hours later.

[72] Instead, Dr. Latulippe testified that a volvulus can exist for a period of time without problem but that eventually the twisting will create an obstruction. He explained that the intestine can be likened to a long tube floating freely in the abdominal cavity. There are vascular attachments holding it but it can twist on itself. Once it twists on itself, it can exist in this state without a problem, but eventually the twisting will create an obstruction and cut off the flow of blood. He stated at p.1169 of his evidence:

> Un volvulus, en fait, on peut considerér l'intestin comme un long tube, puis l'intestin est libre dans la cavité abdominale. Il peut donc se placer un peu comme il le desiré. C'est certain qu'il y a des attaches vasculaires qui le retiennent, mais a l'intérieur de sa liberté, il peut venire se tordre sure lui-même. En se tordant sur lui-même, il peut être comme ca sans probleme, mais éventuellement la torsion peut creér une occlusion de la branche afférente, c'est à dire du saignement proximal.

[73] Dr. Latulippe also testified that a volvulus can resolve by untwisting of its own accord. If it does not, it will progressively strangle the bowel. He agreed that *after* a volvulus strangles the bowel cutting off the flow of blood, that portion of the bowel lives for a period of six to eight hours.

[74] When the appellant examined the respondent on April 5 it was around midday or about twelve hours after her admission to the hospital. She had had the urine from her bowel drained by a Foley catheter, her pain level showed significant improvement, and the distension of her stomach that had been previously observed had disappeared. The appellant was able to palpitate the respondent's abdomen more easily. The appellant consulted with the radiologist and was advised that the x-rays showed a partial intestinal obstruction. At that time, the appellant testified that his examination revealed no signs of peritonitis.

[75] Two of the signs of peritonitis are guarding and rebound tenderness. "Guarding" is an involuntary reflex contraction of the muscles of the abdomen when the examining person pushes on it. Another sign, "rebound tenderness," occurs when the examiner presses on an area and it is not the fact of pressing but of releasing the pressure that

causes pain. Dr. Latulippe also testified that the respondent's chart indicated that no signs of peritonitis were present at this time.

[76] Having regard to the improvement in the respondent's condition and to the absence of peritonitis, I would hold that it was open to the trial judge to infer that, although a volvulus was present, it had not progressed to fully strangle the respondent's bowel and cause it to die by noon of April 5.

[77] I would also disagree with my colleague's conclusion, expressed at para. 40 of his reasons, that the respondent's bowel quietly died during the afternoon of April 5. Dr. Latulippe agreed that as a bowel obstruction develops, the magnitude of the signs and symptoms of pain increases. He also testified that the pain associated with an intestinal blockage begins, becomes very high, diminishes and can even disappear. The magnitude of the pain experienced by the appellant beginning at about 8:50 pm on April 5 increased and followed the pattern described by Dr. Latulippe.

[78] Beginning at about 8:50 pm on April 5, the nursing notes indicate that the respondent complained of pain under her rib cage and that the pain was more intense when deep breaths were taken. This was significant. The x-rays taken when the respondent was in the emergency ward and which the appellant had discussed with the radiologist revealed dark or blackish structures close to the image of the ribs. At 11 p.m., although the pain under the rib cage was less intense, the respondent's abdomen was "*very sensitive to touch"* and "*moderately distended"*.[8] [Emphasis added.] The respondent had been in the hospital almost twenty-four hours and her condition was certainly not stable.

[79] At 11:15 pm the respondent was in such pain that she was requesting an analgesic for the pain. An order for Demerol and Gravol was given. This temporarily reduced the pain.

[80] Although the appellant submitted that no inference could be drawn from the fact that the nurses called the appellant, Dr. Latulippe testified that in a regional hospital, the doctors have a tendency to rely greatly on experienced nursing personnel. He added:

> Par là ce que je veux dire c'est que les infirmiéres viennent habitueés à voir ces patients-là et savant que, si l'etat se

[8] When the respondent was first admitted to the hospital her bladder was very full and she was in pain. Dr. Latulippe testified that in order to be in a position to conduct an accurate examination it is standard to order that the bladder be drained by means of the insertion of a Foley catheter and then for the patient to be re-examined to see if the pain and sensitivity were attributable to the fullness of her bladder. The appellant did this and his exam, conducted at noon on April 5, reflects the respondent's resulting improvement. The nursing note at 11 pm indicates that despite the use of a Foley catheter to empty urine from the bladder the abdomen was becoming distended and hard.

> détériore, elles doivent appeler pour spécifier au docteur, 'Écoutez, il y a quelque chose qui ne marche pas.'

Thus, according to Dr. Latulippe, nurses will call a doctor when a patient's condition is deteriorating and the doctor will rely on them to do so. The trial judge quoted this passage at para. 58 of his reasons. The nurses called the appellant three times between 9 and 11 p.m.

[81] Apart from the nursing notes, the trial judge relied on the appellant's own note, made on the morning of April 6, which indicated he was aware of the respondent's "worsening condition since last night".

[82] The trial judge's conclusion that surgery when the respondent's condition worsened would more probably than not have saved her bowel is further supported by a combination of two factors. They are Dr. Latulippe's description of the stages of peritonitis and the appellant's description of the condition of the respondent's bowel at the time of operating.

[83] Dr. Latulippe testified that there are different degrees of peritonitis and *he linked the start of peritonitis to the start of the loop in the bowel becoming necrotic.* The longer the bowel was in a necrotic state, the more infection. He testified:

> Il y a différents degrés de péritonite. On peut avoir … *à partir de l'apparition de l'anse nécrotique, il est certain qu'une réaction inflammatoire devient importante*. Donc… [Emphasis added.]
>
> Donc, la nécrose va engendrer une reaction inflammatoire qui va être temoignée…qu'on peut reconnoître par la présence de fibrine et de liquide dans la cavité abdominale. Progressivement, au fur et à mesure que la nécrose va progresser, ce liquide va devenir trouble car, même en l'absence d'une perforation franche, des bactéries peuvent passer à travers la paroi intestinale necrotique On peut parler, alors, de peritonite purulante.
>
> Le dernier stade est lorsque l'intestin est franchement perforé et le contenu intestinal se déverse dans la cavité abdominale, et on parle alors de péritonite stercorale, "stercoral" faisant référence au mot grecque qui veut deut dire "selle", "stool."

[84] A rough translation of the above passage is:

> There are different degrees of peritonitis. One can have…*beginning with the appearance of the necrotic loop, it is certain that an inflammatory reaction becomes important.* Therefore…
>
> Therefore, the necrosis will engender an inflammatory reaction that will be evidence …that one can recognise by the presence of fibrin and liquid in the abdominal cavity. *Progressively and proportionally* as the necrosis progresses, this liquid will become trouble because, even in the absence of an open perforation, bacteria can pass through the wall of the necrotic intestine. One can then speak of purulent (pussy) peritonitis.
>
> The last stage is when the intestine is openly perforated and the intestinal contents diversify (spread) into the abdominal cavity, and one speaks then of stercoral peritonitis, stercoral being a reference to the Greek word that means stool.

[85] The appellant testified that when he operated on the respondent, there was some free fluid, which was bloodstained, there was no fecal contamination, there was no actual puss, and once he irrigated the abdominal cavity it was clean with the exception of fibrin

deposits on the bowel wall. [9] Considering the appellant's evidence together with the evidence of Dr. Latulippe as to the three stages of peritonitis indicates that, as there was no stercoral peritonitis and no pussy peritonitis, Dr. Dervish was dealing with peritonitis that was still in the first stage when he operated on the respondent at 1 p.m. on April 6.

[86] The evidence of Dr. Latulippe that a volvulus ought to have been suspected, that worsening of the patient's condition during the period of careful observation was indicative that the volvulus was progressing to strangle the bowel, that as the bowel is strangled the level of pain increases, the progression of the respondent's pain, the stages of peritonitis and the extent of peritonitis described by the appellant when he operated on the respondent, all entitled the trial judge to make the common sense inference he did that surgery at 11 p.m. more probably than not would have saved the respondent's bowel.

[87] The appellant submits that, as no doctor gave direct evidence in support of the trial judge's conclusion, he was not entitled to draw the inferences he did. In *Snell v. Farell*, *supra*, at paras. 36-37, the Supreme Court cited with approval the decision of *Sentilles v. Inter-Caribbean Shipping Corp.*, 361 U.S. 107 (1959) at 109-110. That case held that the power of the trier of fact to draw the inference that the plaintiff's condition was aggravated by the defendant's negligence was not impaired by the failure of any medical witness to testify that this was in fact the cause. Further:

> Neither can it be impaired by the lack of medical unanimity as to the respective likelihood of the potential causes of aggravation, or by the fact that other potential causes of the aggravation existed and were not conclusively negated by the proofs….The [triers of fact] not the medical witnesses, were sworn to make a legal determination of the question of causation. They were entitled to take all the circumstances, including the medical testimony, into consideration.

In the same vein, at para. 44 of its reasons in *Snell* the court held that:

> …it is not essential to have a positive medical opinion to support a finding of causation. Furthermore, it is not speculation but the application of common sense to draw such

[9] Dr. Latulippe spoke of the presence of fibrin clots when peritonitis begins. Inferentially, he disagreed with Dr. Axler's written opinion that the presence of fibrin clots was an indication that peritonitis had been present for several days and his oral evidence that it meant at least more than one day. Dr. Dervish explained that when a person has an intestinal obstruction there is distension of the bowel proximate to the obstruction that becomes congested and can cause an outpouring of plasma from the bowel wall into the peritoneal cavity. This plasma contains fibrin which will deposit on the outside lining of the bowel wall and is seen, for example, when there is acute appendicitis or an intestinal obstruction (as opposed to peritonitis) that has been there for a day or two.

> an inference where, as here, the circumstances, other than a positive medical opinion, permit.

[88] The evidence indicated that surgery when the respondent's condition worsened was vitally important. The trial judge allowed for two hours after the respondent's condition worsened for surgery to take place.

[89] With respect to the absence of evidence as to the availability of an operating room on the night of April 5, I note the evidence of Dr. Latulippe that if an operating room was not available within six to eight hours after the need for surgery was indicated, the respondent should have been transferred to another hospital. Moreover, when the culprit in causing injury is a delay in treatment, a reasonable delay at the end of the chain of events cannot be used as a factor to insulate physicians from liability for their negligence in causing the initial delay: *Law Estate v. Simice* (1994), 21 C.C.L.T. (2d) 228 (B.C.S.C.), aff'd (1995), 2 C.C.L.T. (2d) 127 (B.C.C.A.).

[90] The focus at trial and on this appeal was on the question of whether the appellant's delay caused *any* loss of the respondent's bowel. However, the effect of the appellant's negligence on the respondent did not cease when her bowel died. It continued to affect her until she was operated upon.

[91] The following evidence supports the conclusion that the longer the delay in operating after peritonitis sets in, the more bowel will be affected:

[92] the unanimous medical evidence, including that of the appellant, that when peritonitis is observed an operation should be performed as soon as is practicable;

[93] Dr. Latulippe's evidence as to the progressive effect and stages of peritonitis on the bowel and surrounding areas; and

[94] Dr. Latulippe's evidence that if an operation cannot be performed within 6 to 8 hours of peritonitis being observed the patient should be transferred to another hospital.

[95] In addition, Dr. Dubinsky, an expert in emergency medicine, testified that a delay in operating on a person with a volvulus would have unfortunate consequences. He said:

> A volvulus means that the bowel is twisted in such a way that it's cut off from it's blood supply. When that happens, there is a very time-limited window of opportunity in which, if the patient is fortunate enough to get access to surgical therapy, the bowel can sometimes be untwisted and, as a consequence of that untwisting, remain viable so that the patient doesn't require a bowel resection at all. So that's the first opportunity if you will.

> …
>
> The second thing that happens is that when the bowel has remained twisted for a period of time and becomes necrotic or dies, it is necessary, it's unavoidable to resect that piece of bowel…
>
> …
>
> One of the things that certainly happens is that, as the fluid begins to gather, the patient becomes more and more in a worse state of shock and, as a consequence of that worsened state of shock, the blood flow to the portions of bowel adjacent to the area that's dead ….begin to diminish and, as a consequence of decreased blood supply to areas of the bowel that aren't twisted but simply being deprived of their blood supply, they too may die, and so the length of bowel that's resected may get extended, if you will, in terms of the length of the bowel that needs to be resected.
>
> Q. Does this take a second, a minute, an hour? What are we looking at?
>
> A. Hours.

Shortly after this evidence was given, counsel for the appellant objected to a question to Dr. Dubinsky on the basis that he was not a surgeon but an emergency doctor and counsel had let him testify for too long in describing the things that lead up to what happens in the bowel. Counsel for the respondent responded that the doctor could assist the court in understanding the impact of the delays in surgery. The trial judge replied:

> Well, this witness can't tell me what they would have been on this patient, can he? As a matter of probability or -- he can only tell me, in a general fashion, what they can be.

When Dr. Dubinsky's examination resumed, he was asked:

> Q. So, if you don't catch the pattern, it's going to be allowed to continue, isn't it?
>
> A. That's correct.

> Q. And the more it does, and the more it becomes necrotic, the more complications for this person in terms of the affected area of bowel, is that fair?
>
> A. Yes.

No objection was taken to these questions as a general statement.

[96] Although the trial judge stated at the outset of his reasons that he did not place much weight on Dr. Dubinsky's evidence because he was an emergency doctor and not a surgeon, the evidence forms a useful background for the evidence of Dr. Latulippe.

[97] Dr. Latulippe testified that once surgery was undertaken and a volvulus discovered it had to be evaluated. If it was not necrotic, it would be untwisted; if it was necrotic it would not be untwisted because of the toxic products that would be released into the circulation system. Instead, the surgeon would try to limit the extent of resection in the region of the volvulus without untwisting it.

> En présence d'un volvulus, il faut évaluer si l'anse volvulée est encore vivante ou franchement nécrotique. Si elle est encore vivant ou suspecte mais on va lui donner le bénéfice du doute, à ce moment on détord le volvulus, et on va placer sur l'intestin des compresses chaudes pour voir s'il récupère.
>
> Si à l'ouverture de la paroi -- si a l'inspection on découvre un volvulus avec une anse franchement nécrotique, dans ce cas on ne détord pas l'anse intestinale parce que les vaisseaux et les veines surtout vont contenir beaucoup de produits de dégradation des cellules qui peuvent être toxiques si elles sont relâcheés dans la circulation générale. *Donc, on va essayer de limiter la résection a la region volvulée sans le détordre.* [Emphasis added.]

The obvious reason for limiting the resection is to preserve as much bowel as possible.

[98] Dr. Dervish's operative report indicates that "Inspection showed that there had been torsion of the bowel along its mesentery with two complete rotations, thus causing occlusion of the blood vessels, ischemia and gangrene. The torsion was undone. The bowel was then resected at the point of torsion…".

[99] While the operative report would, as my colleague concludes at para. 58 of his reasons, give rise to the conclusion that only the portion of the bowel deprived of blood

as a result of the volvulus was removed, the pathology report tells a different story. The pathologist measured the specimen of the respondent's volvulus and gangrene small bowel at 140 cm.

[100] Surgery was performed fifteen hours after the respondent's condition worsened. If, as my colleague suggests at para. 40 of his reasons, the respondent's deteriorating condition at 9 p.m. on April 5 was indicative of the onset of peritonitis, Dr. Dervish's delay in operating greatly exceeded the six to eight hour time frame within which he should have acted. When the respondent's condition worsened, Dr. Dervish was obliged to attend on the respondent and to operate within six to eight hours. His failure to do so either caused the loss of her bowel or aggravated her condition by allowing infection from the bowel to spread. At the very least, the appellant's negligence aggravated the respondent's short bowel syndrome and provides an additional reason for dismissing the appeal on the issue of causation. No substantial wrong or miscarriage of justice occurred within the meaning of s. 134 of the *Courts of Justice Act*, R.S.O. 1990, c. C.43.

[101] There is one last argument advanced by the appellant that I will briefly address. The appellant also submitted that it was scientifically impossible to know when the loop or twist in the respondent's bowel occurred and when it progressed to fully strangle her bowel. Thus, he submitted it is impossible for the respondent to prove that but for the appellant's delay in operating she would not be suffering from short bowel syndrome. I have rejected this submission for the reasons given above. If, however, the appellant's submission was to be accepted, I would hold that the requirements of the material contribution test are met.

[102] As noted in *Resurface Corp. v. Hanke*, 2007 SCC 7 at para. 25, the two requirements for the material contribution test are as follows:

> First, it must be impossible for the plaintiff to prove that the defendant's negligence caused the plaintiff's injury using the "but for" test. The impossibility must be due to factors that are outside the plaintiff's control; for example, current limits of scientific knowledge. Second, it must be clear that the defendant breached a duty of care owed to the plaintiff, thereby exposing the plaintiff to an unreasonable risk of injury, and that the plaintiff must have suffered that form of injury. In other words, the plaintiff's injury must fall within the ambit of the risk created by the defendant's breach. In those exceptional cases where these two requirements are satisfied, liability may be imposed, even though the "but for" test is not satisfied, because it would offend basic notions of fairness and justice to deny liability by applying a "but for" approach.

[103] An example given by the Supreme Court of Canada as to when the material contribution test may be applied involved two persons negligently firing guns and injuring a third person. This test was applied because it was impossible to determine which of two tortious sources caused the injury. Here, only one person was negligent but there are two medical causes for the respondent's condition: a volvulus that caused a portion of the respondent's bowel to die and ensuing infection when timely surgery did not take place. Both of these are within the ambit of risk created by the appellant's negligence.

[104] If detection of the respondent's volvulus was beyond the current limits of scientific knowledge before an operation was carried out, the appellant's delay in operating after her condition worsened was a breach of his duty of care towards her. This breach unreasonably exposed her to the risk of losing her bowel or to losing more of it than she otherwise would have lost. As such, I conclude that the short bowel syndrome from which she suffers is within the ambit of the risk that the appellant created.

[105] For these reasons, I would dismiss the appeal.

[106] I would award the respondent her costs of the appeal.

"Karen M. Weiler J.A."

RELEASED: April 18, 2007

APPENDIX 1

Date	**Time**	**Relevant excerpts from Nurses' notes**
Wednesday, April 5	8:50 p.m.	Complained of pain under rib cage – more intense with deep breath. Dr. Dervish called and advised.
	9:00 p.m.	Electrolytes taken. [Illegible writing]
	9:30 p.m.	Dr. Dervish advised of electrolytes result and Foley output.
	11:00 p.m.	States pain under rib cage less intense now. Abdomen very sensitive to touch especially lower abdomen. Firm to touch and moderately distended. Dr. Dervish called and advised of Foley output and change in abdomen
	11:15 p.m.	Patient rang – requesting analgesic for pain localized in lower abdomen radiating to lower back
	11:20 p.m.	Demerol 50 mg and Gravol 50 mg given
	11:40 p.m.	Somnolente. Dit que douleur abdomen commence à diminuer
Thursday, April 6	12:30 a.m.	Abdomen : bas abdomen distendu et ferme et abdomen sensible à la grandeur. Pas de péristaltisme perçu à l'auscultation abdomen. Se dit plus confortable
	1:00 a.m.	Dort bien – patiente parle dans son sommeil
	2:00 a.m.	Patiente éveillée et à des hallucinations visuelles et auditives/moments et s'en rend compte – Ex. regarde devant elle et dit qu'elle pensait voir la télé – parle seule et lorsque je lui demande si elle me parlait dit « je croyais qu'il y avait quelqu'un d'autre, je parle encore toute seule je suppose »
	2:45 a.m.	Éveillée – pas de douleur.
	3:45 a.m.	Sonne. Dit que O_2 lui donne la nausée – N/6 irrigué à 20 cc NSS sans résistance et se dit mieux. Dit avoir frotté son abdomen à « Baume du Tigre » et que ça détend ses muscles
	4:20 a.m.	Sonne. Agitée. Dit qu'elle n'a plus de position, qu'elle n'arrive pas à se reposer et se plaint d'une douleur commençant dans abdomen et traversant région dorso-lombaire droite A l'auscultation poumons : [Illegible writing] Se dit fatiguée et n'arrive pas à se reposer

	4:40 a.m.	Démérol 50 mg; Gravol 50 mg donnés pour douleurs ci-haut notées
	5:00 a.m.	Plus calme. Somnole/courtes périodes mais parle +++ dans son sommeil et essaye de ramasser choses dans les airs
	5:30 a.m.	Éveillée. Dit que médicament pour douleur la rendent « WACO » parce que voit des choses qui ne sont pas là et des gens et entend des gens et leur répond et demande si c'est du démérol et de la codéine qu'on lui donne et dit que sa mère réagissait comme ça au démérol.
	7:00 a.m.	Se dit fatiguée du lit et être inconfortable et « restless » et tendue et demande à s'asseoir au fauteuil. Installée au fauteuil gériatrique
	8:00 a.m.	To x-ray via stretcher
	8:30 a.m.	Returned. Tolerated fairly well. Complained of feeling weak. On and off. [Illegible writing] Abdomen less distended than yesterday but still complains of pain. Analgesic given. Foley in place – urine concentrated. Blood work done. Ativan given. Husband at bedside.
	11:00 a.m.	Drs. Killorn and Dervish visited. ABG's done. Shave prep done. Prepared for O.R.
	12:15 p.m.	To O.R.