Neutral Citation: [2014] IEHC 393

THE HIGH COURT

[2012 No. 8002 P.]

BETWEEN

CIARA HAMILTON

PLAINTIFF

AND

THE HEALTH SERVICE EXECUTIVE

DEFENDANT

JUDGMENT of Mr Justice Ryan delivered on the 31st July, 2014.

Introduction

1. The plaintiff is a social care worker who was born on the 14th June, 1983. She is married with two children, aged five and three years and lives in Castlemaine, Co. Kerry. The plaintiff claims that she became severely depressed and suffered post traumatic stress disorder as a result of a dramatic, frightening experience at Kerry General Hospital before and during the birth of her second baby, Jacob, on the 11th June, 2011.

2. A crisis arose when the midwife carried out an artificial rupture of membranes ("ARM") and the umbilical cord prolapsed so that it was in danger of being constricted or occluded by the baby's head. In the ensuing emergency, the plaintiff was rushed to the operating theatre for caesarean section and in the course of the journey the midwife had to hold the baby's head away from the cord up to the point when the operation was about to begin. In the result, the baby was born in good condition, although he was ill for a time after birth, and subsequently developed a difficult congenital condition unrelated to the circumstances of his birth.

3. The crisis was precipitated by the artificial ruptures of membranes. The plaintiff's experts allege that this procedure was unnecessary, that it was carried out at the wrong place, that the midwife should have consulted a senior obstetrician before doing the procedure and that she was seriously in error and negligent in doing it at a time when the baby's head was in a position in the pelvis that permitted the cord to prolapse downwards when the waters were broken.

4. The focus of the debate on liability is the performance of the artificial rupture of membranes by the midwife. There is also significant disagreement as to the plaintiff's psychiatric conditions. Her expert maintains that her depression was caused by the traumatic experience that she had and also that she suffered post traumatic stress disorder. The defendant's expert is of the view that some element of the plaintiff's depression is due to the birth circumstances, but not all, and he disagrees that the plaintiff was or is suffering from post traumatic stress disorder.

5. Mr Henry Hickey S.C., Dr John O'Mahony S.C. and Mr C. O'Mahony BL appeared for the plaintiff while Mr Declan Buckley S.C. and Ms Imogen McGrath BL represented the defendant.

6. On any view of the case and irrespective of liability in negligence, it is clear that Mrs Hamilton underwent a frightening and disturbing experience that would leave long term troubling recollections.

The events of the 11th June, 2011

7. The plaintiff's first baby, Emily, was born on the 29th October, 2009, at Kerry General Hospital, Tralee. On this pregnancy her general practitioner referred her to the same hospital. Her estimated date of delivery was the 12th June, 2011. On the 9th June, 2011, the plaintiff presented to the hospital at 11.30am. She was at this stage at 39½ weeks' gestation. She had been experiencing contractions. Midwife Moriarty examined the plaintiff and applied a cardiotocograph ("CTG") that yielded a trace extending over 33 minutes. The plaintiff was there for something under an hour when the midwife told her that she could go away for two hours, suggesting a visit to the local shopping centre, and come back after lunch for further assessment.

8. Mrs Hamilton returned to the hospital at 2.30pm, where the CTG apparatus was once again applied, this time by Midwife Kelliher. The plaintiff was in bed in the ward. At 3.00pm, Midwife Kelliher carried out a vaginal examination. The plaintiff's evidence is that the midwife said that she was just going to check her. The midwife had a piece of medical equipment, an amni hook, with which she ruptured the membranes and the waters suddenly flowed out. Midwife Kelliher immediately cried out "I've got cord", and raised the alarm. Doctors and nurses rushed to the scene and Mrs Hamilton said that one of the doctors asked Midwife Kelliher: "why did you do that? Why didn't you call somebody?" At this point the plaintiff said Dr. Lanchandari, obstetrician, said: "this isn't the time or the place". There ensued a dramatic rush to the operating theatre, which was located on an upper floor. The doctors and nurses ran pushing the bed down two corridors to get to the lift. During the rush, Midwife Kelliher was running backwards by the side of the bed with her hand in the plaintiff's vagina, holding the baby's head away from the umbilical cord. Somebody said that they were not going fast enough and the plaintiff helped Midwife Kelliher to clamber on to the bed so that speed could be kept up. When they got to the operating theatre, the plaintiff had to slide over from the bed onto the table and Midwife Kelliher went with her.

9. During this time it was explained to the plaintiff that she would have to undergo a caesarean section. The plaintiff was extremely afraid. She said she was terrified and that she thought that she and her baby were going to die. She remembered asking the obstetrician to save the baby rather than herself. Happily, neither of those disasters came about. The baby was born in good condition, although he was ill for a time and although the plaintiff was very worried about him, she herself made a good physical recovery.

10. The evidence of the midwife, Ms Claire Kelliher, is scarcely less dramatic than that of Mrs Hamilton. She is a Clinical Midwife Manager Grade II, who has experience and qualifications in the United Kingdom and Ireland. She has been employed in Kerry General Hospital for the last seven years. She has overall responsibility for the midwifery staff of the hospital, of which there are seven on duty in the mornings and six in the evenings. She said that she had the training and authority in the hospital to perform an artificial rupture of membranes, to augment labour and/or to assess the liquor which indicates whether the baby is suffering distress. Generally

in practice, when making a decision on whether to perform an ARM a junior midwife consults a senior midwife. Ms Kelliher quoted statistics for 2013 showing that 48% of women had ARM performed and they were done by midwives. It was not the practice to do it in the operating theatre in the hospitals in Ireland in which Ms Kelliher had worked.

11. Midwife Claire Kelliher's note began at 14.30 when the plaintiff returned to the hospital. The midwife said that the plaintiff was not distressed. She applied the CTG and in doing that carried out a full abdominal palpation. At 15.00 she examined the CTG trace and noted that the base variability was equal to or less than 5 bpm ("beats per minute") and that there were no accelerations. This was a sub-optimal CTG and so she proceeded to a vaginal examination. She said that the head was engaged, fixed and not mobile. It was not ballottable, *i.e.* not movable. She was satisfied about the fixed head position because of her abdominal examination by palpation. She felt that the sub-optimal trace of the CTG could indicate foetal distress and there was, she felt, a serious risk of that.

12. On vaginal examination she found the cervix was effaced, the forewaters were bulging and the head was at station -2, low enough in the pelvis and fixed. The plaintiff had had a vaginal sweep the previous day and the midwife had no concern about the progress of labour. She described what she meant by the head being fixed and said that it did not bounce. She carried out the artificial rupture of membranes to review the colour of the liquor to see if there was meconium present which would indicate foetal distress. The risk was that there might be substantial compromise of the fetus. She decided on an ARM and did not think there was a risk of cord prolapse. She would not have carried out the procedure if the head was mobile and in those circumstances, if she had been concerned about the situation, she would have called the doctor. She brought an amnihook with her and got consent from the plaintiff to the procedure. The patient's co-operation was needed in terms of re-positioning on the bed, the procedure might take some time and the implement was quite long, so it is not something that a person would or could do without the knowledge of the patient.

13. The plaintiff got into position, was co-operative and consented to the vaginal examination. Ms Kelliher used a hook and gel and of course surgical gloves. She put a sheet under the plaintiff and got her to move down in the bed and discussed with the plaintiff what she was going to do. Midwife Kelliher said that she "would have discussed", but in my view that was a matter of usage and she clarified that she actually meant, not that she would have in the sense of describing a practice in a conditional sense, but that she did with Mrs Hamilton.

14. When she carried out the ARM, the liquor was clear and Ms Kelliher immediately felt the cord and called a colleague. At this stage an established drill went into operation. She raised the alarm and kept her right hand in the vagina to keep the pressure off the cord. The whole thing happened very quickly. The operating theatre was notified and ready and they proceeded with Mrs Hamilton to theatre as an emergency. She said it was a very efficient pace. She did not recall an altercation or rebuke or comment by a doctor such as Mrs Hamilton had described and Midwife Kelliher said that she could not imagine that it would happen. She remained in place holding the head away from the cord until the consultant told her she could release it.

Cross examination on the facts

15. Mrs Hamilton was challenged by Mr Declan Buckley S.C. for the defendant, in respect of her evidence of the conversation or comment that Mrs Hamilton said the doctor made when he arrived following the alarm raised by Midwife Kelliher. Counsel pointed out that there was no reference to this comment in any of the medical reports of the plaintiff's experts, either those dealing with liability or with her psychiatric condition. His point was that if Mrs Hamilton had indeed remembered this, she would have mentioned it to at least one, and probably all, of her experts. The failure to mention it to any of the doctors does seem to raise a large question mark about the accuracy of this recollection.

16. Similarly, Mr Buckley challenged the plaintiff's evidence that she was not told or warned about the ARM and that the midwife had simply carried out the procedure without preamble. Midwife Kelliher gave evidence that she had discussed the procedure with the plaintiff, she had with her the amnihook and had to get the plaintiff's co-operation as to the position she was in for the procedure to be carried out. Mrs Hamilton would have seen the hook and would have known what was going to happen because of the sheet that was put under her in bed. Since, on the evidence, this was a routine procedure that Ms Kelliher was carrying out for the purpose of diagnosis to see if her fear of foetal distress was justified or not, it does seem strange that she would not have mentioned to the patient what she was going to do and have obtained her consent. The very fact that it was so routine suggests that the midwife would have done so. I am satisfied that the probability is that Midwife Kelliher obtained the plaintiff's consent and informed her about the ARM that she was going to perform.

Post-natal events

17. The plaintiff came around at 4.15pm. She said that the hospital staff were not helpful or informative and she was worried about notifying her husband. Then it transpired that he had been in the hospital all along. Jacob was born with a normal Apgar score. When she saw him, she got a shock because he was wrapped in tinfoil. Jacob became very ill 24 hours after delivery. He was vomiting and very floppy. He was in the neonatal intensive care unit for some eleven days. The diagnosis was unclear, but the plaintiff was told that his symptoms were symptomatic of Group B Streptococcus and she told Dr Sheehan that a paediatrician had said that somebody had not done their job. She had informed the staff in the unit that she herself was a Strep B carrier. Jacob was diagnosed with reflux and was put on formula milk. She had hoped to breastfeed him.

18. Mrs Hamilton was in hospital until the 14th June and left leaving Jacob behind her in the intensive care unit. She was very fearful of holding him and was afraid even of bonding with him. She thought he was going to die and had the feeling that she did not want to get too close to him because of that. She soon began to suffer nightmares, up to six or eight a night. The nightmares included her having a prolapsed cord and the baby not making it to the intensive care unit. It was surreal and as if she was watching herself in the bed. She described how she would be drawn back to the events if she smelt a familiar perfume that she associated with it.

19. Mrs Hamilton was home for about a week when Jacob came home. She and her husband, David, had him in a moses basket and Mrs Hamilton was obsessive about him, staring and watching him and giving him his four hour feeds. But it was only basic care that she gave him, although she was so obsessively anxious that something might happen to him. She was unable to bond with him and she looked after Emily while her husband looked after Jacob.

20. Jacob did not meet his developmental milestones and, at eleven months of age, he was diagnosed as having Chiari malformation following an MRI scan. A question arose as to whether he would require surgery.

21. The plaintiff felt no excitement when she was at home and she progressively lost interest. She was detached from Jacob although she did attend to his basic needs. She became irritable and tearful. She lost interest in her appearance and remained in bed. She lost confidence and blamed herself for not speaking up about the Group B Streptococcus. She felt guilty about not breastfeeding. She had very poor sleep. She continues to be fearful and watchful of Jacob. She lost her appetite and her weight went down. She had poor energy and had been swollen due to oedema. She had complete loss of libido and slept in a spare room for a number of months. She

denied having specific suicidal thoughts, intentions or plans, but had momentary thoughts of self harm.

22. The plaintiff returned to work in January, 2012 and decided to pursue a legal case.

23. Mrs Hamilton was examined by Dr John Sheehan for the defendant. She attended him on the 24th February, 2014, and had an assessment of 70 minutes duration. The plaintiff described significant improvement. She had not had a nightmare for a week and a half at that point. She can take a long time to fall asleep, but is busy during the day with her daughter and also caring for Jacob. Her confidence and self esteem are back to normal. She had resumed intimacy with her husband when her son was about nine months old and would like another child, but is nervous of becoming pregnant and going through labour. Her mood is now good, but she can have an occasional low day. She has been off work since October, 2013 but would like to go back, perhaps working in a day centre rather than doing shifts and nights as before.

The Expert Evidence
24. The plaintiff's case in negligence is based on the evidence of her experts, Prof. Ann Thomson, an expert in midwifery, Mr Roger Clements, Consultant Obstetrician and Mr Malcolm Griffiths, Consultant Obstetrician. The defendants' experts were Prof. Fergal Malone and Dr Peter Lenehan. The relevant evidence of these witnesses is summarised as follows.

25. Before turning to that I should mention that the plaintiff's experts' reports also included some adverse comments that are not material to the issues in the case, such as record keeping and the fact that the plaintiff was a Group B Streptococcal carrier in her previous pregnancy. Mr Griffiths expressly confirmed that these matters have nothing to do with the case.

Plaintiff's Experts

Professor Ann Thomson
26. There was no evidence to warrant the performance of the artificial rupture. In particular, the CTG was reassuring; there was not a lack of uterine contractions or a lack of fetal heart rate variability and progress of labour was not slow.

27. The midwife should have sought obstetric advice if concerned about the CTG results. Generally, if obstetricians are concerned about the heart trace, they observe the colour of the liquor and perform an artificial rupture in theatre with the necessary precautions in place.

28. On the second vaginal examination, Mrs Hamilton was 5cms dilated and the baby's head was 2cms above the ischial spines, which is a contra-indication to an artificial rupture of the membranes and therefore breaking the waters artificially was sub-standard care. It was inappropriate for a midwife to break the waters in the circumstances because of the risk of the cord prolapsing.

29. No abdominal examination was carried out after Mrs Hamilton's return to hospital after lunch. Such an examination could have shown whether the baby did a flip while Mrs Hamilton had been walking; to check the baby was still a cephalic presentation and to check the level of the baby's head above the symphysis pubis. Failure to do this amounted to an incomplete examination.

30. The midwife did not obtain the plaintiff's permission, neither did she discuss the procedure with her beforehand.

Mr Roger V. Clements
31. There was no indication that justified artificially rupturing the membranes. The progress of the labour was 1cm an hour, which is not slow progress and would not normally require intervention by ARM. There was no foetal distress. The reasons offered are not real indications of concern but an attempt to justify why the procedure was done.

32. The CTG of the 30 minutes prior to Mrs Hamilton's walk was in every way reassuring. Mrs Hamilton returned and the CTG recommenced, recording from 2.36pm until 3.17pm. No uterine activity was shown and no foetal movements were recorded. He was of the opinion that the tocographic part of CTG was not working – it is unthinkable that there were zero contractions for more than 30 minutes. The plaintiff was dilated to 5cm so she must have been having contractions. The midwife described her as having "painful contractions"; they were irregular contractions but not to the point that she only had one every 30 minutes because that would not be recorded as irregular. The plaintiff was overweight so it is possible that the CTG belt was not adjusted properly, which is a common error.

33. The second CTG, around 2.38pm, shows the plaintiff's rapid pulse rate which Mr Clements said was a result of her walk and which would have resulted in an increase to the baby's heart rate. At 3pm the baseline is recorded as 158bpm which would be consistent with plaintiff's pulse rate. By 3pm the band width was 10bpm, which is a normal baseline variability, having been quite short between 2.50 and 3pm. These recordings contained nothing to suggest foetal distress, and were possibly just the baby waking up.

34. A midwife's role is to manage normal labour and if labour ceases to be normal she seeks the advice of an obstetrician. Mr Clements said it is not a midwife's job to manage foetal distress and Midwife Kelliher was not entitled to take matters into her own hands. If there had been foetal distress, which would have shown as an abnormal CTG, the next stage would be to look at the colour of the liquor and, if necessary, take a blood sample from the baby's head. That would be a way of investigating an abnormal CTG and would be a decision made by a doctor. There are steps a doctor would then consider, including access to an operating theatre. That does not arise here because there was no foetal distress.

35. The ischial spine level is equivalent to the moment that the head engages. If the foetal head is 1 – 2 cms above the ischial spines, there will be space alongside the head for the umbilical cord to descend if the membrane ruptures. The midwife noted that the head was at -2cm, in which circumstances it was not good practice to break the waters artificially. It was still early into the labour and the head had not descended. If the head is 4/5 palpable, it is in high position and mobile. Mr Clements disagreed with Mr Buckley, who suggested in cross-examination that -2 meant 3/5 of the head was below the pelvic rim and 2/5 above.

36. The reasons for not doing the ARM greatly outweighed the reasons for doing it because it could not predictably achieve anything that had to be achieved. An ARM can speed up labour but if labour is already progressing there is no benefit from it.

37. At the time the ARM was performed, the notes say that the waters were bulging and there was a greater danger in rupturing the membranes in those circumstances because liquor could flow through and carry the cord with it. If the situation was otherwise, *i.e.* if the cervix and head were in close proximity, there would be no room to bulge and nothing could get past. In this case, the cervix was not applied to the head so there was space around it.

38. A spontaneous rupture would have triggered a uterine contraction and moved the head into the correct position, thus reducing

the risk of cord prolapse. The risk of spontaneous prolapse with a cephalic presentation is rare.

39. When the ARM was performed, the amniotic fluid was clear with no meconium in the liquor and no foetal distress.

40. Had the ARM not been performed, Mr Clements's opinion is that the plaintiff would have laboured naturally and reached full dilation within hours.

Mr Malcolm Griffiths
41. The care of Mrs Hamilton was correct and appropriate except for the ARM and subsequent management of the cord prolapse, which was sub-standard.

42. There was no justification for the ARM, particularly in an area away from the operating theatre. The plaintiff was only just in established labour when she left to go for lunch and during that time, her cervix dilated from 2cm to 5cm. There was no issue as to lack of progress. The membranes were bulging which is what happens normally when the cervix is dilating.

43. The first CTG was completely reassuring with no cause for concern. The second CTG showed acceptable variability. There was nothing that would give any cause for concern until the ARM was done.

44. The midwife should have looked at 40 to 90 minutes of CTG before coming to a decision to do an ARM. A foetal heart rate reading of 158 is not abnormal and a one off reading is not conclusive evidence of distress. There was nothing suspicious about reduced variability at 5bpm where it was only present at that stage for 25 or 30 minutes.

45. The sensible thing for midwife to do was to discuss the situation with an obstetrician. The ARM actually provoked a sequence of events which endangered the fetus.

46. When the baby's head was 2cm above the ischial spines, there was more of the head in the abdomen and the head was not engaged so it was mobile and not applied to the pelvis. If there is a fixed head the risk of the cord prolapsing becomes minimal. The head at 4/5 palpable was neither fixed nor engaged.

47. The procedure was performed in a sub-standard manner. There was no input from an obstetrician and it was not appropriate for the midwife to carry out an ARM in the circumstances. Performing an ARM in a location where a patient then had to take a lift to surgery was inappropriate and unacceptable.

48. As a direct consequence of the ARM there was a cord prolapse that put the baby at risk of cord compression and asphyxia and required the plaintiff to have an emergency caesarean section.

49. Spontaneous cord prolapse is seen very rarely in cephalic presentations and is usually only associated with pre-term labour or non-cephalic presentation. If the ARM had not been done, the level of risk in letting the pregnancy progress normally would have been less than 1%.

50. The umbilical cord blood gases and the Apgar score at delivery do not indicate asphyxia and therefore the general anaesthetic given to the plaintiff was unnecessary and amounts to sub-standard care.

Defendant's Experts

Professor Fergal D. Malone
51. The midwife's decision to perform the ARM was appropriate and would have been reasonably made by other professionals in the same position having regard to the plaintiff's slow labour, lack of uterine contractions and lack of foetal heart rate variability. Dr Malone said that if he had been called in to consult prior to the ARM, he would have asked for more reassurance and had the midwife perform the ARM.

52. There is no evidence in the medical records that reasonable care was not exercised. In his opinion care was provided to a high standard. The midwife took all necessary precautions and acted on the evidence. The baby was delivered in perfect condition, which confirms the high standard of care.

53. In circumstances such as the plaintiff's presentation, a midwife or doctor cannot assume that the baby is asleep, do nothing and run the risk of a hypoxic baby who develops cerebral palsy. One option is to perform an ARM. Other options include attaching a monitor to the baby's head or taking a blood sample from the baby's scalp to check the pH level, but both of these require the membranes to be ruptured first.

54. The midwife did the vaginal examination, established that the head was fixed, considered the results of the trace and decided to perform the ARM which was a perfectly appropriate decision. If she had not done it and the baby's heart rate improved by itself then everything would been fine but if she had not done it and the baby's heart rate continued to be flat, which is consistent with hypoxia, she would have missed an opportunity to help the baby and avoid a major disaster.

55. The consequences of missing hypoxia include brain damage, spastic diplegia and cerebral palsy. These potential consequences have to be balanced against the plaintiff's distressing experience and the caesarean section and anaesthesia that she did not desire.

56. One could not categorise the first CTG as normal or abnormal as the results do not meet the strict definition of either. The second CTG from 2.30 to 3pm shows persistent reduced variability, with no decelerations and insufficient accelerations to categorise it as reassuring. The variability is considerably less than the morning when the opposite would have been expected as the plaintiff had been walking around and changed position. The baby should have been jumping around at that point but the variability was reduced. Prof Malone thought that the CTG had recorded accurately; the tocogram suggested irregular contractions and the reduced variability, on the balance of probability, was indicating the likelihood of a hypoxic baby. The optimal result on a CTG is to see a jagged line to show variability. Reduced variability indicates that the baby is hypoxic.

57. Prof Malone rejected Prof Thomson's suggestion of a glass of water as an alternative to the ARM in the circumstances because it was the second CTG trace and it was not reassuring so a glass of water was not going to reverse hypoxia if it was present.

58. The majority of the 9,000 births per year in the Rotunda Hospital are managed by midwives. Doctors are only called when there is a confirmed problem. 40 – 50% of patients have an ARM performed by a midwife.

59. It is quite common for an ARM to be performed at -2 station. A baby whose mother has previously given birth and who is in that position will not usually have a mobile presenting part. In the plaintiff's first labour, an ARM was performed at -2cm without any cord prolapse, which is consistent with typical practice and results for this procedure.

60. The abdominal examination is less precise than the vaginal. It is impossible to fit a CTG without doing an abdominal examination because the apparatus needs to be placed where the baby's anterior shoulder is to get the best heart rate pick-up. Usually, abdominal and vaginal examinations are carried out but attention is really placed on the vaginal because the precision of the abdominal is limited. The vaginal examination is more accurate because the patient's weight is not an issue and trumps the other when there are different clinical findings.

61. Prof Malone agreed that the baby's head is not engaged at -2 but said that it always follows that there is some space available for the cord to come down, with an increasing risk at each higher level from 0. A cord prolapse when the head is at -2 or -1 is not common but it can happen. At -2, the head is well down in the pelvis but there is a bit of space. The risk of cord prolapse when the head is at this station is about 0.25%, or 2 in every 1,000.

62. Even when the baby's head is fixed, it is a fallacy to think that it is perfectly round and immobile as there is a small space remaining. It is possible that the cord was beside the baby's cheek or face and, when the membranes ruptured, the gush of fluid pushed the cord out.

63. As to performing an ARM away from an operating theatre, Prof Malone said that guidelines refer to the necessity of arrangements being in place for a general anaesthetic when an ARM is performed but that is only where there is a high head and therefore a higher risk of prolapse, which was not the case with the plaintiff. Skills and drills are performed in hospitals to prepare staff for emergency situations, such as occurred here.

64. Prof Malone's opinion was that the function of the midwife was to seek reassurance at all times of the baby's well-being. If she had information that indicated potential compromise, she had to take steps to achieve confirmation. If the midwife did not know the baby's condition it was her duty to investigate.

Dr Peter Lenehan
65. Dr Lenehan observed that it was perfectly reasonable for the midwife to have performed the ARM. The plaintiff's forewaters were bulging with cervical dilatation at 5cm and a high risk that spontaneous rupture would occur, which would have carried a high risk of prolapse.

66. Progress of labour was slow given that plaintiff had had a previous labour and delivery. The CTG was non-reassuring because;

(i) the foetal heart rate was hovering at the upper limit of normal at 160;

(ii) variability was reduced to equal or less than 5bpm;

(iii) there was no acceleration during the trace.

67. The midwife was correct in rupturing the membranes to see the colour of the liquor. Labour was slow and an ARM can reduce stress, which can prolong labour. It is a reasonable course as long as there is rapid access to emergency caesarean section, as was case here. The midwife made the correct decision, she immediately detected the cord prolapse, the cord was kept off the head and the baby was delivered safely.

68. If the baby's head was at -2, one would expect it to be 2/5 palpable. It is not possible to apply a CTG without doing a thorough abdominal examination because the nurse needs to know where the baby's head is to place the monitor in or around the baby's heart. Given the plaintiff's weight, vaginal assessment was much more accurate than an abdominal examination.

69. The midwife found that the head was not ballotable. She was an experienced midwife and Dr Lenehan's experience was that no midwife with that background would have performed an ARM if the head was mobile.

70. It is always the position that whatever station the head is at, the midwife always checks before removing her hand that there is no cord prolapse because, although it happens rarely, it can happen.

71. As to having to move the patient to another floor for surgery, Dr Lenehan said the important fact was that the baby was delivered within 30 minutes, which is within the safe practice limits.

72. If spontaneous rupture of membranes and prolapse occurred, there would have been a delay in diagnosing and hypoxia may have occurred to the baby.

73. As to anaesthetic choice, Dr Lenehan said that it depends on the circumstances of the emergency situation and the urgency as to which can be administered more quickly. The choice of general anaesthetic was correct in the circumstances because attempting regional anaesthesia might have delayed delivery of the baby.

Submissions
74. In brief additional submissions, Mr Henry Hickey SC for the plaintiff, referred to the expert evidence and emphasised the points that the ARM was obviously the wrong decision because the baby was not distressed according to the CTG reading at 15.08. The cord prolapsed, therefore the head was not fixed because there could not have been a prolapse if the head was fixed. The midwife came to do the vaginal examination with the intention of rupturing the membranes because she brought the necessary equipment. In doing so, she acted prematurely and contrary to the Royal College of Obstetricians and Gynaecologists guidelines.

75. Mr Declan Buckley SC for the defendant, said that the plaintiff's experts had accepted that the CTG trace in the afternoon was not reassuring. He disavowed the implication of the plaintiff's obstetricians' evidence that he characterised as treating childbirth as akin to an engineering process.

76. The issues that have to be considered in relation to liability are whether it was negligent to do the ARM because:

(a) there was no justification for it?

(b) the midwife should not have made the decision?

(c) it was done in the ward and not in the operating theatre?

(d) the baby was at a station -2 where his head was mobile and an ARM was contra-indicated because of the risk of cord prolapse?

The Law

77. These questions have to be addressed in light of the legal tests summarised and approved in *Dunne v. National Maternity Hospital* [1989] I.R. 91. Of particular materiality to this case are points (d) and (e) of the *Dunne* test, which provide that an honest difference of opinion between doctors as to which is the better of two ways of treating a patient does not provide any ground for deciding that the person who followed one course rather than the other was negligent and that it is not for a judge to decide which of two alternative courses of treatment is in the judge's opinion preferable; the Court's function is merely to decide whether the course of treatment followed, on the evidence, complied with the careful conduct of a medical practitioner of like specialisation and skill to that professed by the defendant.

Discussion

78. The decision in this case is a choice between expert witnesses. Are Prof Thompson, Mr Clements and Mr Griffiths correct in declaring negligence or are Prof Malone and Dr Lenehan right in saying that there was no negligence? There is little to choose between the expertise of the witnesses and, except for one issue, the case cannot be decided on that basis. Prof Malone has a quite exceptional record of academic achievement, prestigious appointments and scholarly publications. Dr Lenehan has had long experience and distinguished service in responsible hospital positions. Mr Clements and Mr Griffiths are eminent obstetricians who also enjoy high repute as expert witnesses in Ireland, the United Kingdom and elsewhere. Prof Thompson is a notable expert in midwifery.

79. There is however an area of significant difference in obstetrical practice between the UK and this country concerning the role of the midwife. Evidence of the Irish system is confirmed by Dr Lenehan and this difference in practice removes one criticism of what happened in this case, namely, that Midwife Kelliher made the decision to do the ARM without consulting the obstetrician.

80. An ARM is a routine procedure that is employed in a high percentage of pregnancies for a variety of reasons, therapeutic or diagnostic. In Ireland the midwife, not the obstetrician, performs the rupture. Good practice in the USA is the same. If an obstetrician decides that an amniotomy is appropriate, normal practice in Ireland is that the midwife carries out the procedure. An ARM is done in the labour ward or its environs and not in the operating theatre, unless there is some unusual feature of the case that calls for that special arrangement.

81. In regard to the facts, they are not in dispute to any material degree. There is disagreement as to the circumstances that followed immediately on the cord prolapse being discovered by Midwife Kelliher. The plaintiff, Mrs Hamilton, gave evidence that a doctor came along and made comments that implied that Midwife Kelliher should not have done what she did in performing the ARM, either doing so at all or doing so in the ward. Mrs Hamilton did not mention this point to any of her expert witnesses, her GP or her Consultant Psychiatrist, Dr Lucey. Neither did she mention it to Prof Thompson or Messrs Clements or Griffiths. Those facts I regard as significant and the evidence is in conflict with that of Midwife Kelliher. I am not satisfied that the doctor made the alleged comment. Such an observation, even if it had been made, would not of itself establish negligence.

82. The plaintiff's experts went some way with Mr Buckley's suggestions as to the CTG in the afternoon before the midwife did the ARM. Mr Clements acknowledged that the presence of accelerations is reassuring and, if they are absent for a long time, it is worrying. Up to the time that the ARM was performed the accelerations were not reassuring. Mr Griffiths agreed that the lack of accelerations was not reassuring but also said it was neither alarming or worrying.

83. Midwife Kelliher decided to perform the ARM to check for foetal distress by examining the liquor for meconium, which if present would indicate a problem. The ARM would also advance labour, but that was not itself the reason for the procedure. I accept that the midwife's function was to ensure that the baby was in good condition and, if not satisfied of that, to proceed further to achieve confirmation. That is what Midwife Kelliher did. She had both an absence of reassurance and evidence that raised legitimate and reasonable concerns about hypoxia and she responded to the facts. Mr Clements and Mr Griffiths acknowledged that the lack of accelerations was not reassuring, although they did not consider that a cause of concern. In deciding to perform the ARM, Midwife Kelliher acted in accordance with good medical practice and was not negligent. Mr Clements inferred that the CTG was not recording the tocograph reading and that the baby was asleep but that approach was rejected by Prof Malone and I think it was more speculative than inferential.

84. The risk/benefit balance was heavily in favour of ARM with one proviso, namely, that the baby was in a safe position for the procedure to be done. Head station is one measure of suitability but the fundamental point, the issue highlighted in the guidelines of the RCOG, is head mobility. If the foetal head is not fixed, ARM should be avoided because the particular danger is that the umbilical cord will prolapse and compress, thereby compromising the baby's blood and oxygen supply. Obviously, there may be circumstances where the rule may not apply but that question does not arise in this case. The baby's station at -2 did not mean that the head was mobile or not fixed. True, it was not engaged as at position 0 and there was more space around it, but that did not make it mobile. Prof Malone gave a demonstration using a model that appeared to confirm his evidence. The plaintiff's experts relied on the 4/5ths measurement to establish that the head must have been mobile and thus that the ARM could not be safely carried out by Midwife Kelliher.

85. The debate about the baby's position is more about whether the head was fixed than about a specific measurement, according to the RCOG guidelines that were cited in evidence of the experts. Measurement is a judgment made by the midwife, based on an abdominal or a vaginal examination. The latter is more accurate, particularly in a person who is considered overweight by medical opinion, as the plaintiff was at the time of her second pregnancy. Regardless, the assessment is not precise however it is done. Dr Lenehan described the powerful forces at work in this situation and how the woman's body and the baby are moving in relation to each other, such that fixed and movable are themselves somewhat relative terms and it is not a case of absolutes or engineering precision. It must be a judgment to be exercised by the clinician, who in this case was Midwife Kelliher.

86. The midwife said that the baby's head was not ballotable, *i.e.*, mobile, and could recall that it would not "bounce", *i.e.*, move away and back on pressure applied. She was aware of the importance of movability and went on with the ARM in view of its non-ballotable station.

87. Midwife Kelliher is highly qualified and experienced. She has held responsible positions in the UK and here she is the senior midwife in the hospital. She impressed me as a careful and expert nurse. It would be a basic step to check the baby's head and not to proceed unless it was fixed. This testimony is to be rejected, on the plaintiff's case, because the inferences from the nursing note as to the baby's head position lead to the conclusion that it must have been mobile. On that however, the defendants' experts rebut the inferences and conclusions. I accept that Midwife Kelliher did a vaginal examination, that the head was at -2cm, that it was not mobile, and that she had the knowledge and experience to appreciate the importance of the station and would not have done the ARM if the situation was otherwise.

88. The fact that the baby was born in good condition and was not hypoxic is not evidence that the ARM was negligent. The cord prolapse is not proof that the head was mobile when the ARM was done. That is one reason why the prolapse might have occurred but against that is the evidence of Midwife Kelliher, supported by the defendants' experts.

89. My view accordingly is that it was reasonable for Midwife Kelliher to seek reassurance; the appropriate step was ARM; she was the person entitled and authorised and qualified to make the decision; she did an examination and satisfied herself that the baby's head was not mobile; the plaintiff consented to the procedure; when the midwife did the ARM she immediately appreciated that the cord had prolapsed and responded appropriately by raising the alarm, while protecting the baby from injury resulting from compression of the cord. The emergency procedure prescribed for such a crisis went into operation and the plaintiff was brought to the theatre where her baby was delivered in good condition.

90. In the circumstances I do not consider that the midwife was negligent. I accept the evidence given by Midwife Kelliher and supported by Prof Malone and Dr Lenehan that the treatment provided by the midwife is not deserving of criticism or condemnation and that the prolapse of the cord was a rare but known complication of the procedure. The midwife responded in a competent manner as did the hospital.

91. It also follows from the evidence of Prof Malone and Dr Lenehan that the management of the plaintiff accorded with a practice supported by a responsible body of expert opinion.

92. The claim must accordingly be dismissed.