## **Report on Opinion - Case 97HDC8985**

#### **Complaint**

The Commissioner received a complaint from a consumer that:

- During maternity care provided by an Obstetrician and Gynaecologist in early April 1997 Prostaglandin gel was used on the consumer's cervix to induce her labour. The use of Prostaglandin gel resulted in her having violent contractions.
- During the birth the Obstetrician used Wrigley's forceps incorrectly and possibly caused the consumer excessive bleeding.
- While the consumer was bleeding in theatre there was a delay in the Obstetrician seeking assistance.

#### **Investigation**

The Commissioner received the complaint from the Medical Council of New Zealand on 2 October 1997 and an investigation was undertaken. Information was obtained from the following:

The Consumer

The Provider / Obstetrician and Gynaecologist

The Clinical Director, Nursing and Midwifery, Crown Health Enterprise General Manager, Crown Health Enterprise

The Royal New Zealand College of Obstetricians and Gynaecologists

The consumer's ACC file was obtained and viewed as were her Hospital medical records, pathology and laboratory results.

The Commissioner received advice from a specialist in Obstetrics and Gynaecology.

Continued on next page

Page 1.1 12 August 1999

## Report on Opinion - Case 97HDC8985, continued

### **Outcome of Investigation**

The consumer was admitted to Hospital in early April 1997 for induction of labour. She was pregnant with her second child. The first child had been delivered 11 years previously in an uncomplicated pregnancy. The exact dates of the pregnancy on this occasion were uncertain. However, an early scan estimated her due date to be in mid-March 1997. Based on this estimate the consumer was 11 days overdue.

The provider, an Obstetrician, advised the Commissioner that a decision was made to induce labour. The Obstetrician stated that in situations such as these "one has to weigh up the risks of prolonged pregnancy versus the risks of induction of labour".

There were two possible options for inducing labour. These were to rupture the consumer's membranes if the cervix was open, and if the cervix was closed, to induce labour with Prostaglandin gel. The consumer queried why alternative methods of induction were not explained to her. The Obstetrician advised that the consumer was not given the option of Synctcinon infusion as her cervix was unfavourable for rupturing of her membranes. It was for this reason that the decision was made to induce labour with Prostaglandin gel.

The consumer was given 1mg of Prostaglandin gel at 10:00am. accordance with the Hospital protocol a cardiotocogram was carried out to monitor foetal heart. This was normal.

The standard policy is to assess the cervix after six hours have elapsed. If it has not changed much a further 1mg dose of Prostaglandin gel is administered. The consumer was given a second dose of Prostaglandin gel at 5:00pm as she was still not in established labour and had an unripe cervix. This was seven hours after the first dose. The consumer awoke at 11:00pm with very severe and very frequent contractions.

Due to severe maternal and foetal distress, the consumer was given two puffs on a ventolin inhaler. The cervix was still only three centimetres dilated so preparations were made for an urgent Caesarean section.

Continued on next page

## Report on Opinion - Case 97HDC8985, continued

### **Outcome of** Investigation, continued

On the way to the operating theatre the consumer had a strong urge to bear down. She was immediately taken to the delivery suite and placed in the lithotomy position. The foetal head was easily visible at the introitus. The Obstetrician advised the Commissioner that this meant that "within a period of 15-20 minutes her cervix had rapidly dilated from 3cm to full dilatation". The Obstetrician commented that the consumer was about to deliver spontaneously. However, due to severe foetal distress he felt that the quickest way of delivering the baby would be using Wrigley's forceps.

The consumer advised the Commissioner that it felt like the Obstetrician tried more than twice to get the Wrigley's forceps positioned and that she was of the opinion that "they were the problem regarding the massive bleeding".

#### The Obstetrician stated that:

"In a patient who is very severely distressed and mobile, I did my best to salvage a baby that otherwise would have died. consumer recalls that I applied the forceps blades more than twice, and I do not think that this is true, as the foetal head was so low and the two forceps blades were easily applied, and the baby delivered very quickly."

The operation record written by the Obstetrician notes that "the baby was very asphyxiated and resuscitated by [...] the Midwife and [a doctor], and pinked up easily with good heart rate and spontaneous respirations, but it took about 15-18 minutes for the baby to start crying".

A noticeable feature was that the baby's head was covered with fresh blood. The Obstetrician commented that "this was most unusual and my initial reaction was that she perhaps had an abruption of the placenta but over the next twenty minutes, it was apparent that the placenta was retained and hence she required a manual removal of the placenta."

Continued on next page

## Report on Opinion - Case 97HDC8985, continued

### **Outcome of** Investigation, continued

There was no delay transferring the consumer to theatre for a manual removal of her placenta. She already had an IV line put up and her blood was cross-matched. Theatre staff were already in theatre as they had been preparing for the Caesarean section. The Obstetrician stated "I appreciate that she was bleeding vaginally after delivery and this can occur with partial separation of a retained placenta. The quickest way to stop the bleeding is to infuse her with IV fluids until blood is available, and to deliver the placenta."

The nursing incident report states that the consumer arrived in theatre at 1:10am. The Obstetrician estimates that he would have been able to carry out the manual removal of the placenta at around 1:30am. Obstetrician's operation record states that the placenta was easily delivered complete. However, the consumer continued to bleed vaginally.

The Obstetrician advised the Commissioner that:

"The commonest cause of pv bleeding after manual removal of the placenta is an atonic uterus, and hence I thoroughly rubbed up the uterus and carried out bimanual uterine compression for about 10 minutes to control the pv bleeding. However she continued to have further bleeding, when I carried out a detailed speculum examination of the genital tract up to the cervix. I grasped the cervix with several ovum forceps and closely inspected the cervix, and apart from a few grazes there were no major tears on it.

I then closely examined the four fornices of the cervix and they too were intact, there were no other lacerations on the rest of the vagina...

... As the above measures still did not control the bleeding and I was noting that the uterus was tending to relax, I kept rubbing up the uterus, and as a last resort put a firm pack into the cervix and one into the vagina, and bimanually kept the uterus anteverted. The vaginal packs became soaked with blood and as it was apparent that the blood was not clotting, my impression was from the severe vaginal blood loss, she might be developing coagulation failure."

Continued on next page

## Report on Opinion - Case 97HDC8985, continued

### **Outcome of** Investigation, continued

The Obstetrician reported that he tried everything possible to control the bleeding including requesting Prostaglandin F2 Alpha for direct injection into the myometrium. The Obstetrician was told that no stocks of Prostaglandin F2 Alpha were kept in the delivery suite. The Crown Health Enterprise advised the Commissioner that Prostaglandin F2 Alpha is kept in the pharmacy and at that time of day a pharmacist would have to have been called in to get it from the pharmacy.

The Nursing Incident Report states that the Obstetrician called an Obstetrics and Gynaecology Specialist at approximately 3:00am. The Obstetrician stated that he called the Specialist because he felt that the consumer had uncontrollable bleeding from an atonic uterus, may be developing coagulation failure and that if a hysterectomy was carried out to control the bleeding it would be helpful to have a senior colleague in At approximately 3:10am the Obstetrician called a second theatre. colleague to advise on IV fluid management.

When the Specialist arrived, the Obstetrician removed the vaginal and cervical packs and another examination was carried out by both the The Obstetrician's operation record Specialist and the Obstetrician. states:

"At this stage it was apparent that the upper segment was well contracted and intact, but the lower segment on the right side appeared to have a defect which was probably extending into the right broad ligament."

The Specialist in his operation record stated that the examination:

"Revealed on the right side of the vaginal vault a lesion through the fornix into the broad ligament which enabled palpation of the lateral side of the contracted uterus. The uteri attachment to the pelvis appeared detached on the side and the uterus could be deviated markedly to the left. Because access to the area of haemorrhage was impossible vaginally, decision was taken for laparotomy and hysterectomy."

Continued on next page

## Report on Opinion - Case 97HDC8985, continued

### **Outcome of** Investigation, continued

#### **Clinical Review**

There was a difference of clinical opinion between the Obstetrician and the Specialist, as to whether there had been a uterine rupture. During the hysterectomy, performed by the Specialist and assisted by the Obstetrician, the consumer suffered damage to a ureter. This required a nephrostomy and ongoing treatment until corrective surgery in July 1997.

The Crown Health Enterprise advised the Commissioner that it had conducted a clinical case review. As part of this review advice was sought from an expert in uterine rupture. The review concluded:

"That this was a very complex case, and that the most likely cause of the severe haemorrhage suffered by [the consumer] was a uterine wall rupture. This occurred as a result of the rapid dilatation of the cervix and the descent and movements of the baby's head, which were related to the rare response to prostaglandin administration. This uterine wall rupture happened prior to the delivery, but the site of bleeding only became obvious after the uterine cavity was packed by [the Obstetrician] in the Operating Theatre. There were several other smaller lacerations that also contributed to the blood loss."

As part of its investigation into the complaint by the consumer, the Crown Health Enterprise sought the advice of an Obstetrics and Gynaecology specialist, regarding the Prostaglandin dosages given to the consumer. This specialist advisor concluded that:

"The dosages and timing of the Prostaglandin gel used to induce were normal clinical practice. The uterine hyperstimulation with subsequent rupture that occurred is a rare but recognised complication of Prostaglandin use. In this case an unexpected and idiosyncratic response to a standard dose."

Continued on next page

## Report on Opinion - Case 97HDC8985, continued

#### Advice to **Commissioner**

The Commissioner's independent obstetrics and gynaecology advisor considered that induction of labour was appropriate. When a pregnancy has gone 10 days beyond the estimated due date induction of labour is usually offered because of the known problems which occur when patients go more than 10 days overdue. The advisor also considered that the use of Prostaglandin gel was appropriate given that the consumer's cervix was unripe. The administration of Prostaglandin was "along standard lines, with an appropriate indication, and done in an appropriate time fashion".

With regard to the use of Prostaglandin gel the Commissioner's advisor concluded:

"There is no doubt that prostaglandin E2, given in this way, sometimes produces profoundly strong uterine contractions, which result in an abnormal foetal heart record, and an associated risk of uterine rupture. The chance of this latter event occurring is rare, probably about 1 in 1000 deliveries where this is used, however it is certainly well described. Contractions at higher strength or associated with increased resting intrauterine pressure are the reasons why CTG monitoring before and after prostaglandin usage, for one hour, is standard treatment and from my recording of the documentation this was what was given to [the consumer]. There does not appear to be a CTG record in the history for me to peruse, however the notes do indicate that the foetal heart was apparently perfectly normal after both the first and second doses of PGE2. Under those circumstances I can find no evidence of a deficiency in care there."

The Commissioner's advisor commented that the use of Wrigley's forceps to effect delivery of the baby was appropriate in the circumstances. "It was certainly appropriate for forceps delivery to be performed in the presence of full cervical dilatation, or near full cervical dilatation, and the presence of a profound bradycardia".

Continued on next page

# Report on Opinion - Case 97HDC8985, continued

### Advice to Commissioner, continued

The advisor further commented that:

"it would be almost impossible for Wrigley's forceps to have produced any damage within the upper vagina at all. The baby's head was noted to be almost on view at the time the forceps were applied, and this means the head has passed well through the cervix. Wrigley's forceps are very short, and would certainly not have been in the region where the tear was ultimately defined."

With regard to the care in theatre at the time of manual removal of the placenta the Commissioner's advisor commented that "it is clear that [the Obstetrician] failed to recognise that the lower uterine segment and/or cervix (probably more lower uterine segment I would believe) was actually ruptured". However, due to the presence of continued bleeding the advisor considered that surgical removal of the uterus would have been required whether the uterus was ruptured or not. The advisor stated that:

"Anyone who has had 12 units of blood, and is still bleeding heavily, needs a surgical exploration and a decision regarding internal iliac artery ligation and/or hysterectomy. abdomen was opened, and the broad ligament haematoma found, the appropriate treatment was hysterectomy. Managing this problem from below (vaginally) and conserving the uterus was not an appropriate option."

The advisor commented that some criticism could be levelled at the Obstetrician with regard to his failure to recognise a tear in the lower uterine segment (right side) and some delay in recognising the need for a laparotomy and the presence of the Specialist.

Continued on next page

## Report on Opinion - Case 97HDC8985, continued

reasonable care and skill.

### **Code of Health** and Disability **Services** Consumers' **Rights**

### RIGHT 4 Right to Services of an Appropriate Standard

- Every consumer has the right to have services provided with
- 2) Every consumer has the right to have services provided that comply with legal, professional, ethical, and other relevant standards.
- 4) Every consumer has the right to have services provided in a manner that minimises the potential harm to, and optimises the quality of life of, that consumer.
- 5) Every consumer has the right to co-operation among providers to ensure quality and continuity of services.

### **Opinion:** No Breach

#### **Right 4(1)**

1)

In my opinion the Obstetrician provided services to the consumer with reasonable care and skill. I accept the advice of my independent advisor that the Obstetrician could not have caused the injuries to the consumer's uterus with the Wrigley's forceps.

#### **Right 4(2)**

In my opinion the Obstetrician provided services that complied with professional standards. The use of Prostaglandin gel to induce labour was appropriate given that the consumer was 11 days overdue and had an unripe cervix. The Prostaglandin gel was administered at six hourly intervals and foetal wellbeing was monitored in accordance with standard practice.

Continued on next page

# Report on Opinion - Case 97HDC8985, continued

**Opinion:** No Breach, continued

### **Right 4(4) and 4(5)**

In my opinion services were provided in a manner that minimised potential harm to and optimised the quality of life of the consumer. The decision to use Prostaglandin gel was appropriate given the possible risks of allowing a pregnancy to continue once the mother is more than 10 days overdue. When the baby was delivered, the consumer had experienced a rapid dilatation of her cervix and there was severe foetal distress. I accept the evidence of the Obstetrician and my advisor that the baby could have died had Wrigley's forceps not been used to effect delivery of the baby.

Although there was some delay between the manual removal of the placenta and the Obstetrician calling for the Specialist, it is my opinion that the Obstetrician was during this time attempting to ascertain the cause of the consumer's bleeding. In my opinion this delay in seeking the Specialist's presence did not demonstrate a lack of co-operation among the providers.

Although the Obstetrician was unable to diagnose the rupture of the consumer's uterus, in my opinion this did not breach the Code. I accept the opinion of my advisor that faced with continuous bleeding a laparotomy was the appropriate action even without a firm diagnosis.

Continued on next page

## Report on Opinion - Case 97HDC8985, continued

#### **Actions**

#### **The Crown Health Enterprise**

My advisor informs me that Prostaglandin F2 Alpha, which is very different to the Prostaglandin gel used for induction of labour, is an integral part of the pharmacopoeia in any obstetric hospital. This is because it is sometimes the only treatment which will result in uterine contraction in a patient with profound uterine atony. Prostaglandin F2 Alpha was unavailable in the operating theatre. The Crown Health Enterprise should address this issue in relation to the provision of its obstetric services.

#### The Obstetrician

The Obstetrician is asked to confirm that in future similar situations he will seek help from a colleague at an earlier stage.

#### **Other Staff**

The second of the provider's colleagues involved in this case will be sent a copy of this opinion as this doctor made statements, based on hearsay, relating to the provider's attitude and behaviour. His comments were different to those stated in interviews with staff present at the time.

#### Medical Council of New Zealand

A copy of this opinion will be sent to the Medical Council of New Zealand for its information.

Page 1.11 12 August 1999