Obstetrician / Midwife / Crown Health Enterprises

Opinion - Case 98HDC14508

Complaint

The Commissioner received a complaint from Ms A regarding the treatment she received following the birth of her ninth child on 17 and 18 November 1996 at a public hospital. The complaint is that:

- *Dr C did not provide services of an appropriate standard to Ms A following the delivery of her daughter on 17 November 1996.*
- *Following the birth of Ms A's daughter on 17 November 1996, Ms B did not take appropriate action after noting the unusual appearance of Ms A's placenta.*
- *In the circumstances Ms B should not have administered syntocinon to assist delivery of the afterbirth.*

Investigation Process

The Commissioner received a complaint on 11 May 1998 and an investigation commenced on 21 August 1998. Information was received from:

Ms A	Consumer
Ms B	Provider / Independent Midwife
Dr C	Provider / Obstetrician

The Commissioner obtained advice from an independent midwife and an independent obstetrician.

Relevant medical and Accident Compensation Corporation (ACC) records were obtained.

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Information Gathered During Investigation

Independent midwife Ms B was Ms A's lead maternity caregiver during Ms A's pregnancy and the delivery of her ninth child. This means Ms B had primary responsibility for Ms A's care during her pregnancy.

During the pregnancy Ms B referred Ms A to Dr D, an obstetrician at the consultant antenatal clinic at a public hospital. This was because Ms A had had more than six pregnancies that had resulted in viable offspring (a "*grand multipara*"), which meant that the risk of this pregnancy becoming problematic was high. Ms B considered it appropriate to consult a specialist during high-risk pregnancies like this. Ms A did not attend the first two appointments arranged with Dr D, but after Ms B had stressed to Ms A the importance of having this consultation, she did attend a third, when she was approximately twenty-five weeks pregnant.

In a note written to Ms B on 13 August 1996 Dr D noted that Ms A had high parity (several previous pregnancies), had previously retained a placenta after giving birth, and had a history of substance abuse and depression. Dr D recommended actively managing the third stage of Ms A's labour. He estimated her delivery date to be 19 November 1996. "Active management" involves the use of oxytocic drugs (such as oxytocin, ergometrine, syntocinon and syntometrine) to stimulate uterine contractions to promote a more rapid labour.

Blood tests were done while Ms A was pregnant which showed she was anaemic. Her ferritin level was 11ug/l on 28 August 1996 and 15 ug/l on 16 October 1996, (below normal). Ms A's haemoglobin level was 105g/l on 4 August 1996 and 108 g/l on 16 October 1996 (normal).

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Ms B explained to the Commissioner that:

> "*I was being mentored during this time and my management of* [Ms A's] *pregnancy was being supervised. I asked* [Ms A] *to have antenatal blood tests taken at the laboratory but she did not get these done and I eventually went to her home to take them myself. The Hb was borderline and I gave* [Ms A] *a script for iron. You will note on the antenatal chart that I asked* [Ms A] *to increase her iron intake. The rise in the Ferritin level from 11 to 15, I believed was due to* [Ms A] *taking her iron tablets. It was really difficult to gain any compliance from* [Ms A] *and I don't mean this in an unkind way but she did have her own priorities. I believed that she was taking the iron. You will note that postnatally I gave* [Ms A] *a further script for iron, paracetamol and Voltaren when she declined to go to her GP. I had not given this script immediately after the birth as she had had a blood transfusion and the hospital discharged her without supplements as the levels were apparently satisfactory.*"

Ms A went into labour spontaneously on 17 November 1996. She arrived at the delivery suite at 9.15pm. Ms B stated to the Commissioner that she then called Dr C, the on-call obstetrician, to notify him that they had a "*grande multip*" who would probably deliver soon, and that she intended to actively manage the third stage of labour. Ms B described this as a standard call to advise Dr C of the situation, should his assistance be required.

Dr C stated that he was not notified at admission as was stated in the delivery summary. He said that he was first notified at 11.30pm when he was told that there was a "*patient with her ninth labour at term and that delivery was imminent*". He advised that intravenous access should be instituted. Dr C confirmed active management of the third stage of labour to be appropriate and that it should be actively managed with oxytocin.

The notes record the delivery of a baby girl at 11.39pm with delivery of the placenta at 11.50pm. The placenta is recorded as being complete in the Labour and Delivery Summary, which Ms B signed. The placenta was not described further, and its weight was not recorded.

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Information Gathered During Investigation *continued*

In a letter to the Commissioner dated 25 August 1998 Ms B stated

> "[Ms A's] *contractions quickly settled into a regular pattern following admission and a vaginal examination at* [9.45pm] *disclosed a soft, stretchy cervix which was 9cm dilated. I inserted an intravenous cannula because of the increased risk of bleeding due to her parity and drew up the syntometrine in preparation for active management. It is customary to draw this drug up at this stage as the midwife or doctor has no time to do this when the baby is coming.* [Ms A] *was using Entonox for pain relief. The baby remained well and had a reactive heartbeat. At* [10.15pm] [Ms A] *consented to having the membranes ruptured and I performed this at* [10.20pm]. *The liquor was clear and the foetal heart rate normal.* [Ms A] *progressed to full dilation and commenced pushing. My mentor* […] *was present also during this time.*
>
> *Ms A gave birth to a baby girl at [11.00pm]. The blood loss was minimal, 100mls. Intramuscular syntometrine was given straight after the birth of the baby. There was a delay of birth with the placenta but the blood loss remained minimal and it was delivered at [11.50pm]. I commented at that point and later to* [Dr C] *that the placenta 'looked funny'. I said this because it was very small in relation to the size of the baby. This is what I meant when I said it appeared unusual. I note that the Commissioner wrote that it is alleged that I did not take appropriate action after noting the appearance of the placenta. There was however nothing about the placenta that we could have acted upon. Generally a very small placenta is related to a growth-retarded baby but this was not the case with baby* […] *and that seemed unusual. Our primary responsibility was to ensure that it appeared complete and I did this although it is not always possible to identify that part of a placenta is missing from simple observation of the placenta. I also mentioned the unusual size to* [Dr C]."

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Information Gathered During Investigation *continued*

In response to my provisional opinion, Ms B stated that:

> "*When I examined the placenta I inverted it to closely examine the edges for missing pieces and vessels extending into the membranes. I checked that it had two membranes and turning it back to the foetal surface I further examined the membranes. Finally I cupped it in my hands to see if it fitted together or if there appeared to be any portion missing.* […], *my first mentor, was with me when I examined the placenta although she did not examine it herself although she looked at it when I commented on the placenta's size and said that it was funny looking and she said it looked like a smoker's placenta.*
>
> …
>
> *This placenta was small and unusual and that made me look at it really carefully and quite curiously, but none of the usual indicators of a missing fragment were present.*"

In a letter to the Accident Compensation Corporation's Medical Misadventure Unit dated 2 July 1998, Ms B commented on the placenta:

> "*I commented at that point and later to* [Dr C] *that the placenta 'looked funny'. It was small and appeared complete but had an unusual appearance.*"

Dr C's recollection of this differs. In a letter to the ACC Medical Misadventure Unit dated 21 May 1998 he wrote:

> "*At all times when I telephoned and when I was present at* [public hospital] *on the morning of 18.11.96 I was assured and reassured that the placenta and membranes were delivered complete. I note that there is a retrospective comment* [in the clinical notes] *timed at approximately* [3.10pm] *suggesting that the placenta, although complete was also small.*"

The clinical notes recorded that 30 units of IV Syntocinon were commenced at 11.55pm.

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Information Gathered During Investigation *continued*

After the birth Ms A recalled lying down for about an hour before being showered. While showering she described losing a significant amount of blood and feeling shaky and weak. At 1.30am Ms B recorded Ms A's temperature as 36.8°, her pulse at 60, blood pressure of 130/80, and that she had passed urine. Ms B described these readings as normal and reassuring. She then stayed with Ms A and stated that there was no clinical reason to take further recordings. She then began rubbing Ms A's uterine fundus (in order to encourage the uterus to contract which would help control the bleeding), which had a good effect. On the Labour Delivery Summary Ms B estimated blood loss at birth as 100ml and total blood loss as 300ml. She later added two further estimates of + 200 and + 500, and noted that this was written in retrospect. In the clinical records at 1.30am Ms B noted the blood loss as 400mls.

Ms B consulted with the public hospital midwives and was advised to continue with the syntocinon infusion. At 2.00am another IV infusion of 30 units of syntocinon was commenced. Until this point rubbing had kept the fundus well contracted, but Ms B at 2.00am noted that it had started to soften again. One ml of syntometrine was given and an indwelling urinary catheter was inserted to ensure that a full bladder was not hindering uterine contraction. Ms B described these as standard measures for dealing with continued blood loss after delivery.

The trickling of blood appeared to settle, but at 2.30am blood flow became brisker. Ms B gave 1ml of Ergometrine, with intravenous Maxolon to help with nausea, and started a plasmolyte infusion (fluid to replace the blood she had lost). At 3.00am Ms B phoned Dr C and asked him to attend, as she was not happy with the persistent blood loss. Dr C ordered another 50 units of Syntocinon. This seemed to be a high dose to Ms B, given the drugs Ms A had already had, so she called him back to double check that this order was correct, and Dr C confirmed it. Both these phone calls are recorded in the clinical records. At 3.10am the hospital midwife called Dr C again and asked him to come in and assess the situation. There is a note in the clinical records, dated 19 November 1996, that she "*mentioned to consultant that the placenta looked funny/small but appeared complete 100mg Voltaren given per rectum (written in retrospect 19.11.98)*". This is found between Ms B's entry timed at 3.10am and Dr C's entry at 3.30am.

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With regard to her record keeping, Ms B wrote to the Commissioner that:

> "*... When* […], *my second mentor, came to take me home, I was reluctant to go but she thought that it was time for the secondary care team to take over. She said to me – let me check the notes. We did this and I realised that I had not written anything about telling* [Dr C] *about the placenta or that I had given Voltaren. I added,* ***before leaving Delivery Suite,*** *'Mentioned to Consultant placenta looked funny. 100mg Voltaren given per rectum' and I signed this entry. I then took a photocopy of the notes which is my practice. In this situation it was as well that I did, as ACC later had difficulty in obtaining this page from the hospital and I was able to give them a copy of what I photocopied at the time. I reviewed the hospital notes on the 19th and added the further comment 'small/but appeared complete' and to make it absolutely clear when I added this I wrote [written in retrospect 19.11.96].*
>
> *I accept that ideally I should have written down a fuller description of the placenta but I knew that I had already told* [Dr C] *of my observations and assumed that would be in his mind. I had been busy, my mind had been on* [Ms A] *and my notes were not as complete as they could have been. I was a new midwife and still learning about those things. My mentor prompted me to check my notes before leaving and I checked them again on the 19th. I had thought that it was acceptable to add additional comments after the birth of things that may have been forgotten due to the clinical situation at the time, as long as it was dated. This is what I did in an attempt to ensure that the notes were as accurate as possible. I can see how this sequence is not clear from the photocopy and I have included a copy of this page of the notes which I made prior to leaving the hospital which shows that at the time I had not added the additional description.*"

Dr C stated that when Ms B called him at 3.00am she told him that there was a persistent trickle of blood and again described the placenta as complete. Dr C therefore suggested the increased dose of intravenous Syntocinon, and he went to the hospital to attend to Ms A.

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When Dr C arrived at 3.30am he described the blood loss as a "*continuing trickle*". Dr C performed a digital examination and expressed 500-600ml of blood clots from Ms A's uterus, which was then very firm. There is no record of any painkillers having been administered to Ms A during this process. Ms B noted this procedure had been distressing for Ms A, and Ms A informed the Commissioner that she believed pain relief would have been appropriate. Dr C's diagnosis was one of "*uterine atony on the basis of multi parity*". He suggested that the Syntocinon infusion be continued and asked that Ms A's blood be cross matched (tested for compatibility with donor blood), and that her haemoglobin levels be checked at 9.00am.

Ms B noted that Dr C took no vital sign recordings at this point and did not ask for ongoing observations as part of his ongoing management plan.

Dr C said that there was minimal bleeding over the next 60 to 65 minutes. The clinical notes record a moderate loss at 4.25am. Ms B handed Ms A over to the hospital team for secondary care at 4.15am. When Ms B left she says the bleeding appeared to be under control, and she stated that:

> "*... the fundus was firm and well contracted and the vaginal loss remained moderate.* [Dr C] *was in the unit ... he left instructions for the* [hospital] *midwives to keep rubbing up the fundus.*"

At around 4.30am, as the uterine fundus appeared to soften and the blood loss continued, Dr C wrote "*further 100ml from softening fundus*" in the clinical records and instructed that the Syntocinon infusion continue. He left the Delivery Suite at 4.35am, having instructed the midwives to continue rubbing the fundus.

Further bleeding occurred. The clinical notes record that Dr C was called at 5.15am, and updated. The notes record that he was told that Ms A was looking very pale, and that although the fundus was being rubbed every five minutes, each time it was rubbed it was soft and it often released while being rubbed. The total blood loss was estimated to be 1540ml at this point and only a small amount of urine was being produced. Dr C ordered a further 50 units of Syntocinon be given to Ms A, and her blood was sent to be cross-matched.

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At 5.45am the attempted cross match was reported to have been unsuccessful. Staff called an anaesthetist who arrived at 6.00am to take more blood.

Ms A's recollection is as follows:

> "*I have now seen the hospital notes …. I note one of the entries at 5.15am on the 18th of November which states 'contacted* [Dr C]*'. What it does not say is that they continued to try to contact him from this time onwards and then kept wondering where he was. It was not until the entry 7.15am where they wrote, 'he is on his way'. Apparently I remember nurses saying that he was held up in traffic. Up until that point they had been panicking because of my condition.*"

These concerns are not recorded in Ms A's clinical notes.

At 6.45am it is recorded that the fundus was firm and that clots were unable to be expelled. By 7.05am 300ml of blood had been lost during the preceding half hour, and the indwelling urinary catheter was replaced to ensure that the bladder was not interfering with treatment.

Dr C was called again 7.15am, at which point he said that due to his concern he was already on his way to the hospital. By 7.30am a further 600ml blood loss was recorded and the steady trickle continued. The midwives were unable to expel clots using fundal pressure. Ms A appeared to be shocked and had a very pale to grey pallor. A further 500 micrograms of Ergometrine was given intravenously. Then another 30 units of Syntocinon.

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On his arrival at 7.45am Dr C found Ms A was bleeding heavily. He therefore decided that an examination under anaesthetic to evacuate Ms A's uterus was required. He noted that she was hypovolaemic (had an abnormally low volume of fluid, plasma, circulating in her body). A further 1000ml of blood and a blood clot were expressed from Ms A's uterus with more clots palpable. Between 8.00am and 8.20am Ms A was prepared for the operating theatre and her consent was obtained for the procedure. During the examination under anaesthetic Dr C found an estimated one third of the placenta remaining in Ms A's uterus. Once this had been removed, the post partum haemorrhage settled.

Concerning the decision to operate, Dr C wrote:

> "*... I decided that examination under anaesthesia was indicated. I obtained consent from* [Ms A] *for this procedure. I spoke to* [Ms A] *later who was fully aware that we had discussed the possibility of hysterectomy and also the possibility of admission to the Department of Critical Care. I feel sure that her consent was fully informed.*"

Concerning the size of the retained placental product, Ms B submitted:

> "... [Dr C] *described ...* [the retained cotyledon] *variously as moderate to large and on a later occasion as one third of the placenta. Given that* [Dr C] *did not see the placenta, and there is no objective evidence, such as an histology report, to confirm the size it is difficult to know how this estimate was made or if it is accurate. I do accept that there was a retained placental product but I cannot accept that I would miss a portion as large as* [Dr C] *says. There would be definite signs such as veins, or uneven edges or an obviously missing cotyledon, when the placenta was cupped in the hands and examined, and none of these were present.*"

Ms A stated that two days following the birth Ms B visited her.

> "*She was in tears. She stated that she wished she had not given me Sintocen to bring on the afterbirth. She now believes that she should have let it happen naturally.*"

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Ms B responded:

> "[Ms A] *wrote in a statement that I visited her post natally in tears and stated that I wished I had not given 'Sintocen to bring on the afterbirth'. With respect I think* that this conversation has become *a little confused in* [Ms A's] *mind. I did visit several days after the birth but at no time wept although, understandably I was sympathetic with all that she had gone through. My concern did not relate to the fact that I had given her Syntometrine which I believe was entirely appropriate, but I was concerned that the CHE staff had given her Depo Provera. Depo Provera is a long acting contraceptive.* [Ms A] *and her uterus had just gone through a traumatic experience. Her partner was at that time in jail and her need for immediate contraception, particularly such aggressive contraception was in my opinion, low. I was surprised that this drug had been given to her so soon after the post partum haemorrhage and it was this that concerned me. We did not discuss my giving of Syntometrine at all.*"

Dr C commented in a letter to the Accident Compensation Corporation Medical Misadventure Unit dated 1 May 1998, that:

> "*A clinical meeting was held at* [the public hospital] *to discuss the events of this delivery and subsequent PPH* [post partum haemorrhage]. *We agreed that the control of the PPH should have been achieved earlier with better communication. ... As consultant on call, I received one brief telephone call immediately prior to her delivery and was not called again until more than 3 hours post delivery. I was then given misleading information as to the completeness of the placenta. This undoubtedly led to delay with the decision time to perform examination under anaesthesia, and consequently, increased uterine bleeding.*"

Ms A described to the Commissioner ongoing physical and mental trauma as a result of these events, for which she has required counselling.

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Independent Advice to Commissioner

The Commissioner received advice from an independent midwife, as follows:

"*1. Active management of the 3rd stage of labour is assisting the placenta to deliver by giving oxytocin or Syntometrine (a combination of syntocinon and ergometrine) at the time of the delivery of the baby's anterior shoulder if using oxytocin or after the birth of the baby if using syntometrine. This is followed by controlled cord traction where the pull on the cord is gentle and pressure is applied with the hand just above the symphysis pubis to prevent inversion of the uterus. This technique is used routinely in some places and by some practitioners but avoided as much as possible by others. There seems to be a consensus of opinion that active management of third stage reduces but does not altogether remove the risk of post-partum haemorrhage. In any situation where the uterine muscle is unlikely to contract well active management is strongly recommended. This includes women of high parity, a history of previous PPH, a history of previous retained placenta, multiple pregnancy and extra large baby. The structure of the uterine muscle is such that contracting reduces bleeding and an overstretched muscle will not contract very well. In spite of these precautions the rate of serious bleeding after childbirth is 1 in 1000.*

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Independent Advice to Commissioner ***continued***

2. When dealing with a PPH of this type the first point is deciding when to call it a PPH. It is not uncommon for a woman to bleed quite briskly after a normal birth followed by a complete placenta. Rubbing the fundus, expelling any clots, emptying the bladder and, if these measures are ineffective, commencing an oxytocin infusion treats this. This infusion is run at a rate, which depends on the response of the uterus. Only if these measures failed would it be necessary for a midwife LMC to call the Specialist Obstetrician. The definition of PPH is blood loss of 500ml or more but in practice this is not so simple. Blood is not mainly in a container where it can be measured but on pads, bedclothes, floor, toilet etc. The actual loss is always a guesstimate. Even so, when blood continues to flow more than normal it is obvious that there is a problem.

3. A placenta is examined after the delivery to determine whether it and the membranes are complete or not and also to check that the cord has 3 blood vessels. The midwife or doctor who delivers the baby is responsible for this check. In practice it would be rather easy to miss the absence of a small piece (10-20 cents size). It is examined on both sides using gloved hands. It is particularly important to check whether any blood vessels run from the placenta into the membranes and come to an abrupt end. This is a sign of a missing succenturiate lobe. When there are 2 or more separate lobes to the placenta it is called succenturiate and one lobe is commonly quite large and the other(s) smaller. These smaller lobes are what the blood vessels in the membranes have been supplied by. No one can know, but it seems to me probable that this was the situation in this case.

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Independent Advice to Commissioner *continued*

4. *I cannot tell in what way the placenta looked 'funny' but small is not hard. A placenta normally weighs 1/6 – 1/7 of the weight of the baby. Given that this baby weighed 4040gm a placenta weighing 600-700gm would be expected. Although all charts have a space for placental weight this is rarely done in practice. Hands become expert at assessing placental weights.* [Ms B] *knew that the placenta was small but did not emphasise this sufficiently to the consultant. Apart from this her actions were correct. I am amazed that the consultant just took* [Ms B's] *word that the placenta was complete though small. Anytime I have been in a similar situation we have all assumed that I was wrong.*

5. *The total drugs given over 7 ½ hours were ergometrine 2000 micrograms + 150 IU syntocinon. These are very high doses. It is unusual to use so much ergometrine in particular.*

6. [Ms B] *was an entirely appropriate person to be LMC for* [Ms A]. *She arranged antenatal visits to both specialist and GP and, most importantly, made sure that* [Ms A] *eventually kept those appointments. She followed the plan made by* [Dr D] *(O&G specialist) to the letter. In view of the fact that* [Ms A] *was a 'non-attender' the care by* [Ms B] *was the best she could have had. She required someone who really did care as LMC. All the appropriate support systems were set in place for this woman who had many needs.*

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Independent Advice to Commissioner *continued*

7. PPH can be rather insidious. The blood trickles rather than gushes and there are often periods where the situation appears to have stabilised. The woman's condition will usually remain stable for some time and then deteriorate rapidly – as happened in this case. Good accurate decision making is essential. The risk factors here – high parity, history of previous PPH and retained placenta, poor socio-economic status, previous drug abuse all need to be taken into account.

8. From study of the documentation it appears that the following scenario developed. A cotyledon (possibly succenturiate) was retained in the uterus and remained adherent until about 0130 when [Ms A] *started to bleed. This cotyledon was not expelled, as would often happen, perhaps because of the high dose of ergometrine used. All other appropriate measures were taken by* [Ms B] *i.e. rubbing of the fundus, IV infusion of syntocinon, catheter inserted into the bladder and specialist notified after these measures failed to control the bleeding. The only action not mentioned by either* [Ms B], [Dr C] *or* [Ms A] *is the use of very strong pressure on the fundus to attempt to expel clots. This is not a procedure that a patient would forget! My overall impression is that the outcome could have been a great deal worse.*"

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Independent Advice to Commissioner *continued*

The Commissioner received advice from an independent obstetrician, as follows:

"*Jun-Nov 1996 Antenatal Course.*
There were no specific obstetric complications. Ultrasound scans confirmed a normal appearance of baby and placenta. Social circumstances were difficult, compliance with antenatal visits was sub-optimal and the patient was receiving psychiatric supervision and treatment for depression. Blood counts revealed a haemoglobin level between 105 and 108g/l (accepted lower normal is 105g/1) and ferritin of 11 and 15 (normal range 15-300ug/1).
Comment
The patient was a grand multipara, aged 36 years and at risk of post-partum haemorrhage. This risk was identified early in the pregnancy and an active 3rd stage correctly recommended. There was no apparent cognisance of the low haemoglobin and ferritin despite the identification of haemorrhagic risk at delivery. The antenatal course was unremarkable and the occasional missed antenatal check did not contribute materially to the adverse outcome. The psychiatric and social difficulties would probably aggravate the impact of any adverse event.

17/11/96 Labour
2339 Rapid labour. IV line sited. Normal vaginal delivery with intact perineum. One ampoule of syntometrine administered by intramuscular injection 'immediately after delivery of the baby'.
2350 The third stage (from baby to delivery of placenta) took 11 minutes. The estimated blood loss was 100mls.
2355 A syntocinon infusion was commenced. Post partum observations were normal.
Comment
The labour was uncomplicated and an effective management of the third stage was implemented. The placenta and membranes were delivered 'intact'. There was no cause for concern at this point.

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Independent Advice to Commissioner *continued*

0130

On mobilising, the patient felt faint and lost 400 ml of blood vaginally. The uterine fundus was 'rubbed-up', intravenous fluid was infused rapidly, a further bolus of syntometrine was given intravenously and the syntocinon infusion was re-commenced (having presumably been discontinued prior to the patient mobilising). The patient was catheterised.

0200

The uterus was now firm.

0230

'Blood loss settled'. Ergometrine (with maxolon to prevent nausea) was administered prior to intended transfer to the antenatal ward. No record of estimated blood loss or vital signs (colour, blood pressure, and pulse rate) is available. A litre of plasma expander was administered.

Comment

There was presumably no cause for concern between midnight and 0130, this time often being employed to encourage early breast feeding whilst the mother remains in bed. On mobilising there was a modest blood loss of 400 ml and minor syncope (faintness) possibly indicating a more substantial blood loss? Blood loss at delivery is often underestimated and some patients, as in this case, may already be anaemic prior to labour. A series of routine and appropriate measures was then instituted and by review at 0230 the blood loss had settled. However a dose of ergometrine was then administered before proposed discharge to the ward implying that a bleeding problem still existed.

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Independent Advice to Commissioner *continued*

0300
Persistent 'trickle' noted and [Dr C] *contacted.* [Dr C] *recommended a high dose syntocinon IV infusion.*
0310
Two further phone calls were made to [Dr C], *firstly to confirm the previous instructions and secondly to request his attendance and assessment.*
Comment
There is no record of an estimated blood loss at this point or of the patient's vital signs (colour, pulse rate, blood pressure) and it is unclear whether these were relayed to [Dr C]. *This is vital information that should have been presented by the midwife and/or sought by* [Dr C]. *In the event the initial response of a high dose syntocinon infusion was not appropriate given the measures already adopted and the continuing problem. There was an underestimation of the severity of the problem by* [Dr C], *possibly due to lack of information. Correctly, this situation was rectified by the Midwifery staff by contacting* [Dr C] *again. This sequence of events is at variance with the report of* [Dr C] *that implies he attended immediately following the first phone call. The delay at this stage however did not contribute significantly to the poor outcome.*

0330
[Dr C] *attends and assesses patient. There is again no record of the estimated blood loss or of the patient's vital signs that would be critical factors at this assessment. The midwifery staff had commented that the placenta appeared unusual but* [Dr C] *makes no mention of this. It is not clear whether he had the opportunity to examine the placenta. 500-600 ml of blood and clot was expressed and the syntocinon infusion continued. A sample of blood for possible cross-matching was ensured and a blood count check recommended for later that morning. A diagnosis of uterine atony (relaxation) was made but the uterus was considered to be well contracted by the end of the assessment.*

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Independent Advice to Commissioner *continued*

Comment
It is difficult to assess the merit of [Dr C's] *assessment and management without the vital elements of estimated blood loss and patient's vital signs. At this point there is a recorded total blood loss of over 1000 ml (100+400+500+trickle) which is significant in a patient who entered the labour with a marginal blood count. Since blood loss is usually underestimated it is wise to add 'a bit extra' when assessing total blood loss and at this point I would estimate the patient's blood count to be about 80g/1. This does not indicate a need for immediate blood transfusion but one would want to be confident of no further significant haemorrhage. An IV line should be in situ and means of procuring blood for transfusion immediately available. These pre-requisites were (vaguely) met in this case. No analgesia was employed to examine the patient and express clots however this process can be achieved successfully if care is taken during the procedure.*

0415
The patient was transferred to secondary care for observation.
0425
A continuing moderate vaginal blood loss was recorded.
0430
[Dr C] *noted a further 100ml blood loss and that the uterus was again soft.*
0435
[Dr C] *left the unit with instructions to continue the syntocinon infusion.*
Comment
It was correct to transfer the patient to secondary care so that closer monitoring could be provided. [Dr C's] *report states that a minimal blood loss occurred during the hour that he attended the patient although the notes state that there was a moderate loss and the uterus continued to soften despite the syntocinon. The patient could not be regarded as stable at this point and I would be concerned about continuing blood loss with an already significantly reduced blood count. The syntocinon infusion was not proving effective in dealing with the suspected problem of uterine atony.* [Dr C's] *departure at this point was premature.*

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Obstetrician / Midwife / Crown Health Enterprises

Opinion – Case 98HDC14508, continued

Independent Advice to Commissioner *continued*

0500
Repeated attempts to 'rub-up' the uterus were proving unsuccessful.
0515
[Dr C] *was contacted again and updated. An estimated blood loss of 1540 ml, continuing relaxation of the uterus despite large amounts of ecbolic medication, pallor of the patient and poor urinary output were recorded and presumably relayed to* [Dr C]. *Further infusion of syntocinon and cross-matching for blood transfusion were recommended.*
Comment
The patient was not stable. Neither the fundal massage or syntocinon infusion were proving successful at preventing uterine relaxation. There were clear signs of major blood loss (pallor, reduced urinary output and high estimated blood loss). Both the diagnosis and haemodynamic status of the patient required urgent review at this point (nearly four hours after the onset of post partum haemorrhage).

0545
Cross matching from the original blood sample proved unsuccessful but obtaining another blood sample proved difficult (probably due to venoconstriction, consequent upon severe blood loss) and the duty anaesthetist was called for assistance. 500mls of plasma expander was administered at this point.
0600
Anaesthetist assessment.
Blood pressure 128/70 Pulse rate 105bpm 'good perfusion'.
Blood taken for cross matching.
Comment
Despite the clinical features the attending anaesthetist did not appear particularly concerned about the haemodynamic status of the patient although he/she may have been largely unaware of the preceding history (having been asked simply to take blood for cross matching). By this point 1.5 litres of plasma expander had been administered which would serve to maintain perfusion and blood pressure.

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Obstetrician / Midwife / Crown Health Enterprises

Opinion – Case 98HDC14508, continued

Independent Advice to Commissioner *continued*

0705
The fundus of the uterus remained high and a further 300 mls of blood clot expelled. (Measured blood loss now 1400 mls plus 'trickle'; my estimated blood loss therefore 1800 mls and likely haemoglobin 65g/1.)
0715
[Dr C] *contacted again.*
0730
BP 104/59 Pulse rate 156 bpm. 'Very pale to grey … shocked'.
Further 600mls blood loss and continuing trickle noted.
Further ergometrine and syntocinon administered.
0745
[Dr C] *in attendance. Enlarged uterus and hypovolaemia noted. Further 500mls of blood clot evacuated 'with more palpable' and continuing bleeding. Transfer to theatre for examination under anaesthesia arranged.*
(Measured blood loss now 2500 mls plus residual clot and continuing bleeding; my estimated blood loss therefore 3000mls and likely haemoglobin 45g/1.)
Comment
Obvious signs of hypovolaemic shock are now appearing as the patient decompensates due to a critically low blood count. Surprisingly no attempt made to provide blood transfusion is made or even mentioned prior to this point.

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Obstetrician / Midwife / Crown Health Enterprises

Opinion – Case 98HDC14508, continued

Independent Advice to Commissioner *continued*

0800
Blood pressure 40/0 Pulse rate 146 bpm.
0820
Transferred to theatre
0830 Evacuation of placental cotyledon and blood transfusion (6 units administered in total). Immediate control of haemorrhage.
Pre-transfusion haemoglobin 50g/1 and after 6 units of blood 106g/1.
Post natal/post operative recovery slow but essentially uncomplicated. The major issue post-natally was anxiety due to the preceding events and fear of recurrent bleeding.
Comment
There is severe shock with an almost unmeasurable blood pressure and severe tachycardia. Nevertheless another 20 minutes passes before transfer to theatre.

Prompt reduction in haemorrhage identifies the retained placental cotyledon as the cause for the post partum haemorrhage.
The pre-operative and post transfusion haemoglobin levels accord with my simple, ongoing estimates of blood loss and estimated impact on the patient's haemoglobin level.

Summary

1. *Despite the recognition of risk for post partum haemorrhage no apparent action was taken with regard to the low blood count.*
2. *Initial management of the post partum haemorrhage by the midwife was thorough and entirely appropriate. The significance of the problem was recognised and request for medical review timely.*
3. *Presentation of the clinical scenario (or at least the documentation of) could have been better.*
4. [Dr C] *should have requested a more detailed clinical scenario before determining initial management (this may be a poor documentation issue).*
5. [Dr C] *attended reasonably promptly.*

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Obstetrician / Midwife / Crown Health Enterprises

Opinion – Case 98HDC14508, continued

Independent Advice to Commissioner *continued*

6. Clinical assessment was either incomplete or poorly documented. [Dr C] *remained in attendance for an hour to assess the patient. Correctly the patient was transferred to Secondary care for observation and blood taken for possible cross matching.*

7. [Dr C] *departed prematurely despite a post partum haemorrhage and continuing haemorrhage with limited response to current treatment methods.*

8. Whether the placenta appeared normal or otherwise is irrelevant at this point. Whether the cause of post partum haemorrhage is uterine atony ([Dr C's] *reasonable diagnosis) or retained placenta (the actual diagnosis), the current treatment is proving ineffective and the post partum haemorrhage worsening.*

9. Despite continuing haemorrhage and signs of shock conservative management was unwisely maintained. Alternative diagnoses and surgical exploration should have occurred earlier.

10. The patient compensated well as evidenced by the fact that the visiting anaesthetist was not unduly alarmed despite a substantial preceding blood loss (which he/she may not have been fully aware of). The outward clinical signs may therefore have been misleading.

11. Nevertheless a simple arithmetical assessment would have alerted the midwifery or medical staff to the seriousness of the situation. Estimation of total blood loss was never recorded.

12. Recourse to urgent blood transfusion was never considered prior to operation, even when the blood pressure became virtually unrecordable.

13. Despite severe hypotension and signs of shock it took 20 minutes to transfer the patient to theatre. This time appeared to be used preparing the patient for theatre and signing the consent form rather than urgently assessing and stabilising her condition.

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Obstetrician / Midwife / Crown Health Enterprises

Opinion – Case 98HDC14508, continued

Independent Advice to Commissioner *continued*

Conclusion

In general midwifery care was very satisfactory. There was appropriate concern about the patient's condition although an incomplete understanding of the relevance of some of the clinical features. The (provided) documentation was very poor with very few records of blood pressure, pulse rate, colour or estimated blood loss.

[Dr C's] *management was too conservative and he failed to fully appreciate the gravity of the situation despite the presence of obvious clinical features (measurable blood loss, continuing haemorrhage, failure of current treatment, increasing signs of shock). His documentation (or assessment?) was poor.*"

Code of Health and Disability Services Consumers' Rights

The following Rights in the Code of Health and Disability Services Consumers' Rights are applicable to this complaint:

RIGHT 4
Right to Services of an Appropriate Standard

1) Every consumer has the right to have services provided with reasonable care and skill.
2) Every consumer has the right to have services provided that comply with legal, professional, ethical, and other relevant standards.
3) Every consumer has the right to have services provided in a manner consistent with his or her needs.

…

5) Every consumer has the right to co-operation among providers to ensure quality and continuity of services.

Obstetrician / Midwife / Crown Health Enterprises

Opinion – Case 98HDC14508, continued

Other Relevant Standards

Midwives Handbook for Practice (New Zealand College of Midwives (Inc), 1993)

Standard 4
The midwife maintains purposeful, ongoing, updated records and makes them available to the woman and other relevant persons.

Opinion: No Breach
Midwife, Ms B

Right 4(3)

I accept my advisor's advice that it was in accordance with professional practice to actively manage the third stage of Ms A's labour, as the risk of Ms A's suffering a post partum haemorrhage was recognised as being high due to her obstetric history. Ms B's initial management of Ms A's haemorrhage was appropriate and thorough. Ms B responded appropriately to the bleeding and the measures that she took, to try and control the bleeding, were entirely reasonable steps to take in the circumstances. After these measures failed to control the bleeding, Ms B recognised that a problem existed and requested assistance from Dr C.

In actively managing the third stage of Ms A's labour, Ms B provided services in a manner that was consistent with Ms A's needs. In my opinion Ms B did not breach Right 4(3) of the Code.

Obstetrician / Midwife / Crown Health Enterprises

Opinion – Case 98HDC14508, continued

Opinion: Breach
Midwife, Ms B

Right 4(2)

Monitoring and documentation

Under Right 4(2) of the Code, Ms A had the right to have services provided to her that complied with professional standards.

Ms B noticed that the placenta seemed small and unusual looking and she examined it carefully and assessed it as complete. She noted to her mentor that it looked small but she made no contemporaneous record of her observation.

The Midwives Handbook for Practice requires midwives to keep accurate and contemporaneous records. In my opinion, by not recording that the placenta was small and unusual looking, at the time of delivery, Ms B did not comply with this requirement.

There is no documentation in Ms A's clinical records to show that her vital signs and estimated blood loss were being regularly monitored. Ms B stated that the only time there was a clinical indication to take these observations, was at 0130 when Ms A felt faint. At this point her observations were normal.

However, given that Ms A had been anaemic during her pregnancy, was at risk of a post partum haemorrhage and had in fact started to bleed following the birth of her baby, I would expect her vital signs and estimated blood loss to have been closely monitored and recorded, so that the magnitude of the problem could be identified and corrective action taken as early as possible.

I have seen no evidence that Ms B monitored Ms A's condition in this way, before she handed Ms A's care over to the hospital team at 4.15am.

For these reasons, it is my opinion that Ms B did not provide Ms A with care that complied with professional standards, and therefore breached Right 4(2) of the Code.

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Obstetrician / Midwife / Crown Health Enterprises

Opinion – Case 98HDC14508, continued

Opinion: Breach

Midwife, Ms B ***continued***

Right 4(5)

Right 4(5) of the Code obliged Ms B to co-operate with other providers involved in caring for Ms A, to ensure quality and continuity of service provision.

Ms B stated that she mentioned to Dr C that the placenta looked unusual when she telephoned at 3.00am to advise him of her concerns that Ms A's fundus would not stay contracted. Dr C says that his recollection is that Ms B did not say that she thought the placenta seemed unusual. Dr C understood from Ms B's communication with him that she considered that the placenta and membranes were delivered complete. He did not pick up that she was nevertheless concerned about the placenta's size and appearance.

Dr C subsequently found a significant portion of placenta remaining in the uterus. If Dr C had understood that Ms B was concerned about the placenta he would better have been able to make a comprehensive assessment of the situation and formulate an appropriate treatment plan.

Ms B's failure to adequately provide Dr C with relevant information after identifying a deviation from the normal placenta led to an unacceptable lack of co-ordination and communication between providers, that compromised the quality and continuity of care that Ms A received. In this way Ms B breached Right 4(5) of the Code.

Obstetrician / Midwife / Crown Health Enterprises

Opinion – Case 98HDC14508, continued

Opinion: Breach

Right 4(1)

Obstetrician, Dr C

Ms A had the right to have services provided by Dr C with reasonable care and skill. In my opinion, there were several deficiencies in the care that Dr C provided to Ms A.

Assessment

When Dr C was first consulted at 3.00am, my obstetric advisor stated that he should have requested a complete summary of Ms A's condition, including information about her estimated blood loss and vital signs. If the midwives did not volunteer this information, Dr C should have requested it. There is no documentation to show that Ms A's vital signs and estimated blood loss had been monitored, so I assume, in the absence of evidence to the contrary, that the information did not exist and was therefore not communicated.

I accept my advisor's opinion that Dr C underestimated the severity of the situation when consulted at 3.00am and responded inappropriately, given the measures already adopted and the continuing blood loss. Despite the continuing haemorrhage and signs of shock, Dr C unwisely maintained conservative management of Ms A's condition. This could have been because Dr C did not have all necessary clinical information. As a result, his initial response (to order a high dose syntocinon infusion) was inappropriate, given the measures already adopted and the continuing problem. In my opinion Dr C should have initiated alternative diagnoses and a surgical exploration at an earlier stage.

I consider that Dr C's orders at 5.15am to commence a further infusion of syntocinon to have been inappropriate, given that to this point these measures had not successfully prevented uterine relaxation and haemorrhage. At that time, Ms A's condition required urgent review as she was showing clear signs of major blood loss and the haemorrhage was showing no signs of abating. Dr C should have attended immediately to reassess the situation, and turned his mind to other possible causes of the haemorrhage, rather than continuing to treat her conservatively.

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Obstetrician / Midwife / Crown Health Enterprises

Opinion – Case 98HDC14508, continued

Opinion: Breach Obstetrician, Dr C *continued*

Premature departure

I do not consider it appropriate for Dr C to have left Ms A at 4.35am. My advisor stated that Ms A's condition could not have been regarded as stable at this point, and the syntocinon infusion had not proved effective in dealing with the suspected problem of uterine atony. I note that although the diagnosis of uterine atony on the basis of multi-parity was incorrect, it was initially a reasonable conclusion to draw in the circumstances.

Delay

By 7.45am, in spite of obvious signs of hypotension, shock and a virtually unrecordable blood pressure, a blood transfusion was not proposed or organised. At 8.00am Ms A's blood pressure was virtually unrecordable yet it was another 20 minutes before she was transferred to theatre. In my opinion, Dr C should have used this time to urgently assess and stabilise her condition rather than to prepare her for theatre and to sign the consent form.

Documentation

My advisor stated that Dr C's clinical assessment was either incomplete or poorly documented. In my opinion, Dr C's record keeping was not adequate and did not comply with professional standards.

Summary

In my opinion Dr C did not exercise reasonable care and skill when providing Ms A with obstetric services, and breached Right 4(1) of the Code.

Right 4(3)

Right 4(3) of the Code gives Ms A the right to have services provided in a manner consistent with her needs.

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Obstetrician / Midwife / Crown Health Enterprises

Opinion – Case 98HDC14508, continued

Opinion: Breach Obstetrician, Dr C *continued*

In my opinion, while performing a digital examination and expression of blood clots from Ms A's uterus, Dr C should have offered Ms A pain relief. My advisor stated that if care is taken during this procedure it could be achieved successfully without analgesia. I consider that it was remiss of Dr C not to offer pain relief to Ms A once her distress became apparent.

Dr C did not provide Ms A with treatment in a manner that was consistent with her needs and therefore breached Right 4(3) of the Code.

Opinion: Breach Crown Health Enterprises

Rights 4(1) and 4(3)

Employers are vicariously liable under section 72(2) of the Health and Disability Commissioner Act 1994 for ensuring that employees comply with the Code of Health and Disability Services Consumers' Rights. Under section 72(5) it is a defence for an employing authority to prove that it took such steps as were reasonably practicable to prevent the employee from doing or omitting to do the thing that breached the Code.

Crown Health Enterprises employed Dr C as a consultant obstetrician at the public hospital. Ms B, an independent midwife, consulted Dr C about Ms A's care in his capacity as a Crown Health Enterprises obstetrician.

I have seen no evidence that Crown Health Enterprises took reasonable steps to ensure that Dr C's treatment complied with professional standards, and that it was provided in a manner consistent with Ms A's needs. In my opinion, Crown Health Enterprises is therefore vicariously liable for Dr C's breaches of Rights 4(2) and 4(3) of the Code.

Obstetrician / Midwife / Crown Health Enterprises

Opinion – Case 98HDC14508, continued

Actions

I recommend that Ms B:

- Apologises in writing to Ms A. The apology is to be sent to the Commissioner who will forward it to Ms A.
- Reviews her record keeping practice to ensure that full and accurate contemporaneous records are kept of all interactions with her clients.
- Familiarises herself with her obligations in the Midwives' Handbook for Practice, especially those obligations concerning the identification of deviations from normal and consultation with medical specialists.
- Advises the Commissioner in writing that these recommendations have been met.

I recommend that Dr C:

- Apologises in writing to Ms A. The apology is to be sent to the Commissioner who will forward it to Ms A.
- Reviews his record keeping practice to ensure that full and accurate records are kept of all consultations.
- Reviews his practice to ensure that a comprehensive assessment of each patient's condition is made, and when problems arise in a patient's management, all possible causes of that problem are considered so that timely intervention can occur.
- Advises the Commissioner in writing that these recommendations have been met.

I recommend that Crown Health Enterprises:

- Apologise in writing to Ms A. The apology is to be sent to the Commissioner who will forward it to Ms A.

Other Actions

Copies of this opinion will be sent to the Medical Council of New Zealand, the Nursing Council of New Zealand, the Royal New Zealand College of Obstetricians and Gynaecologists and the College of Midwives.