Two Unusual Cases of Secondary Postpartum Haemorrhage

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Secondary postpartum haemorrhage is most often due to retained parts of placenta or to infection (Dewhurst, 1966). It seldom occurs after caesarean section, since the placenta is usually completely delivered. Similarly, rupture of a caesarean section scar presenting as a case of secondary postpartum haemorrhage must be very unusual. The following two cases are therefore worth recording.

Case 1

The patient, aged 29 years, was admitted under our care on her twelfth postpartum day with moderately severe vaginal bleeding. Her first pregnancy and labour had been five years previously. Thereafter she had had three abortions. Consequently when her fifth pregnancy was confirmed a Shirodkar suture of tantalum wire was inserted. At 24 weeks she was admitted to hospital because of intermittent vaginal bleeding. At 34 weeks regular uterine contractions began and the cord was found to be prolapsed down the cervical canal, despite the Shirodkar suture. A male child weighing 2,000 g was delivered by lower segment caesarean section. The operation showed no apparent abnormality, the puerperium was uneventful, and the patient went home after nine days.

Our hospital flying squad was called three days later because the patient had had vaginal bleeding for 24 hours, which had become worse. The uterus was the size of a 12 weeks' pregnancy, but the cervix barely admitted a finger owing to the presence of the Shirodkar suture. There was little pelvic tenderness. Vaginal bleeding continued after admission despite a slow infusion of oxytocin (syntocinon), and an ultrasonogram showed a uterus of almost 18 weeks' size full of blood clot with an area at the level of the lower segment which was thought could represent a retrovesical haematoma. The Shirodkar suture was removed under premedication, and obviously much blood and clot had been dammed back in the uterine cavity. Despite further intravenous oxytocin bleeding increased. Examination under anaesthesia revealed a dehiscence of the entire caesarean section scar with a large haematoma cavity behind the bladder. The uterus, now of about 14 weeks' pregnancy size, was lying backwards. At laparotomy immediately afterwards 250 ml of altered blood was found in the peritoneal cavity. When the clot was removed from a large retrovesical haematoma the gaping lower segment of the uterus was defined and brisk bleeding was seen coming from the angles of the lower segment wound. The tissues were very friable and infected, and the old lower segment scar was gaping widely with slough on the wound edges. Bleeding was eventually arrested by subtotal hysterectomy and oversewing the cervical stump. At the completion of the operation the patient had received 14 units of blood and her general condition was good.

Convalescence was uneventful and she went home after 17 days. Histological examination of the uterus showed extensive infection but no malignancy. Six weeks later she was well. The cervix was healthy and mobile and there was no evidence of residual inflammation in the wound or pelvis.

Case 2

The patient, aged 42, was admitted to our unit on her tenth postpartum day with moderate vaginal bleeding. Her first two babies had been

delivered 12 and 10 years previously by elective lower segment caesarean section because of contracted pelvis. In her third and most recent pregnancy she was admitted at 30 weeks because of an antepartum haemorrhage. She went into labour and a stillborn baby was delivered by the breech. A manual removal of placenta was performed, and she was transfused with 8 units of blood because of the antepartum and postpartum bleeding. She left hospital after five days.

On admission to our hospital five days later bleeding was moderate but the pulse rate was 120/min and the systolic blood pressure barely 65 mm Hg. The fundus of the uterus was just below the umbilicus and there was tenderness over the lower abdomen. About 2 pints (1.1 l.) of blood clot was present in the vagina and the cervical os was open. On vaginal examination under anaesthesia the uterus was found to be the size of a 14 weeks' pregnancy, the cervix 4 cm dilated, and the lower segment ballooned with an obvious 3-inch (7.5-cm) gap at the site of one of the previous caesarean sections. Bleeding was still continuing. At laparotomy no free blood was found in the peritoneal cavity. There was a retrovesical haematoma, and when the bladder was reflected down the dehiscence of the lower segment scar was obvious. Bleeding was brisk from its friable and necrotic edges, and it was decided to perform subtotal hysterectomy. Interrupted mattress sutures through the cervical stump eventually controlled the bleeding. Four units of blood were transfused during and after operation. The bladder was continuously drained for 24 hours, but it was discontinued because the urine was free from blood.

Postoperative progress was uneventful. Histological examination of the uterus showed no evidence of malignancy, but necrotic decidua and chorionic villi were seen.

Discussion

Gorodovsky *et al.* (1964) found that over half the cases of delayed postpartum haemorrhage had either retained fragments in the uterus, placental secundines, or placental polyps. Less common causes are listed as subinvolution of the placental site, which is also described by Duckman *et al.* (1970), myomas, oestrogenic withdrawal bleeding after suppression of lactation, coital trauma, and soft-tissue injury.

Our two cases must be attributed to soft-tissue injury, though the timing of the bleeding indicated that the haemorrhage was consequent to tissue sloughing and, though primary haemorrhage may have been present in the second case at the time of delivery, bleeding had almost ceased before the described episode. Dehiscence of the caesarean section scar in the first case was probably due to intrauterine infection at the time of operation interfering with healing. Later separation of sloughing tissue, especially at the wound angles, gave rise to the severe bleeding. The presence of the Shirodkar suture wire may have contributed to the infection but, since there was adequate drainage—even the umbilical cord could prolapse through the cervix—its presence probably did not play any other part in the process of rupture.

The antepartum and immediate postpartum haemorrhage in the second case may have indicated rupture of the uterine scar at that time, though this was certainly not appreciated at the time of manual removal of the placenta. Operative delivery of the placenta could in itself have caused damage to the old scar if the placenta was implanted nearby. It seems, however, that bleeding from any initial soft tissue trauma ceased but that sloughing of infected tissue provoked the subsequent severe haemorrhage.

These cases show that ruptured uterus should be considered when secondary postpartum haemorrhage occurs in a patient who has had a previous caesarean section.

References

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