Secondary postpartum haemorrhage: when subinvolution of the placental site is suspected

Hemorragia pós-parto tardia: suspeita de subinvolução do leito placentar

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Abstract

A 32-year-old woman presented to our emergency department with a sudden late postpartum haemorrhage 30 days after a caesarean section. The transvaginal ultrasound examination revealed a pulsatile and tortuous vessel in the inner third of the posterior uterine wall with an increased peak systolic velocity and a low-resistance waveform. The diagnosis of subinvolution of the placental site was suspected and a Foley catheter with 40cc of normal saline was used as uterine tamponade. After the tamponade, the bleeding subsided. The Foley catheter was removed after 48 hours. Revaluation with ultrasound showed no evidence of abnormal vessels in the myometrium.

Keywords: Secondary postpartum haemorrhage; Subinvolution of the placental site.

A 32-year-old woman, 1 gravida 1 para (twin pregnancy following *in vitro* fertilization), presented to our emergency department with a sudden and profuse late postpartum haemorrhage. The patient had been submitted to an uncomplicated caesarean section 30 days before (labour dystocia at 36 weeks), and until that moment her puerperium was unremarkable. The transvaginal ultrasound examination revealed an uterine cavity filled with an heterogeneous and hyperecogenic content (Figure 1) and a pulsatile and tortuous vessel in the inner third of the posterior uterine wall (Figure 2) with an increased peak systolic velocity and a low-resistance waveform. A diagnosis of subinvolution of the placental site was then suspected.

In order to control the bleeding and to preserve her fertility, stabilization with fluids was initiated and a Foley catheter filled with 40cc of normal saline was used for uterine tamponade. Prophylactic intravenous antibiotic therapy was also performed (2 grams of cefoxitin). After the tamponade, the bleeding subsided. One unit of packed red blood cells and 2 grams of fibrinogen were administered 24 hours later (haemoglobin of 7.3 g/dL and fibrinogen of 224 mg/dL). Since there were no signs of active bleeding the Foley catheter was removed after 48 hours. Revaluation with ultrasound showed no evidence of abnormal vessels in the myometrium and the patient was discharged four days after admission. Up to date this report was written, there hadn't been any readmissions of the patient due to new episodes of haemorrhage.

Although rare, subinvolution of the placental site is one of the main causes of late postpartum haemorrhage. Its management depends on the severity of the bleeding. In hemodynamically unstable women, stabilization (fluids, transfusion of blood products) and avoidance of further bleeding are the priorities[1]. Uterine balloon tamponade has demonstrated a high success rate for the treatment of postpartum haemorrhage[2,3], but its role in late postpartum haemorrhage and specifically in the management of subinvolution of placental site is less well defined. Since the uterine cavity may be too small to accommodate a balloon tamponade device, a standard Foley catheter may be used instead.

This case highlights the importance of conservative management in the setting of a hemodynamically un-

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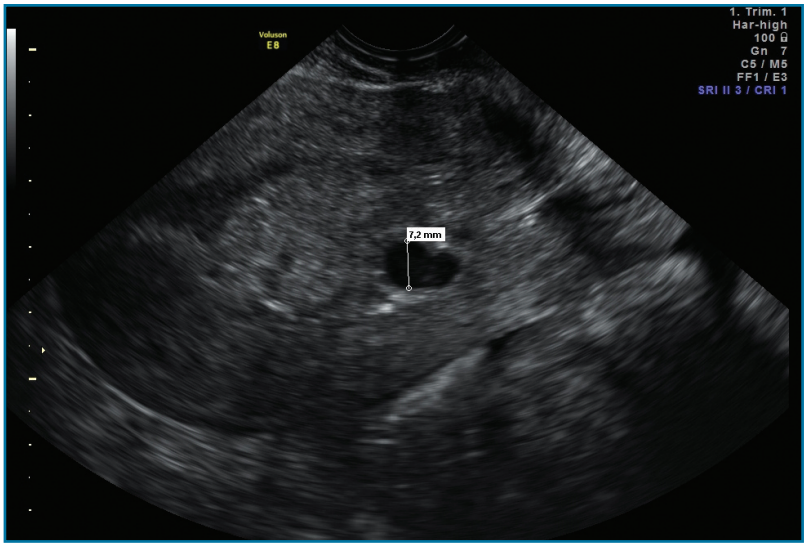

FIGURE 1. Uterine cavity filled with a heterogeneous and hyperecogenic content

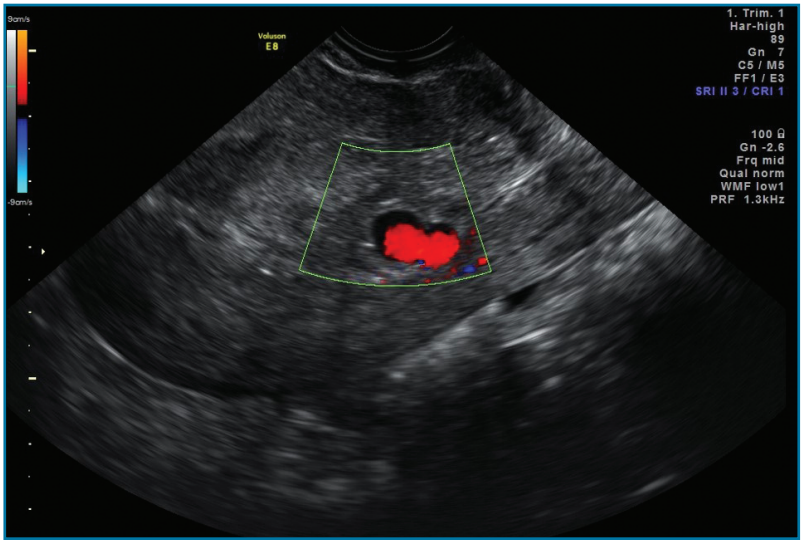

FIGURE 2. Image of colour Doppler showing a pulsatile and tortuous vessel in the inner third of the posterior uterine wall

stable patient in order to try to preserve a patient's fertility. Furthermore, it also emphasises the successful use of a widely available and simple device such as a Foley catheter, which can be useful in both resourced and under resourced settings.

The authors obtained an informed consent from the patient before the submission of this clinical case. International ethical standards have been followed.

The authors have no conflict of interest to declare.

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