

# CASE REPORT: SUBINVOLUTION OF PLACENTA CAUSING POSTPARTUM HAEMORRHAGE – RARE CASE PRESENTATION.

## OBJECTIVE:

Sub involution of placental site (SPSS) is a **rare but severe cause of postpartum** hemorrhage (PPH). This diagnosis must be anticipated and considered in **every hysterectomy** specimen presented to the surgical pathologist.

## CLINICAL PRESENTATION:

A 38-year-old female, Para 3 with **three previous Caesarean sections**, BMI of 38 and previous PPH was booked for elective **caesarean** section at 38+1 weeks. She delivered a healthy 2.9kg with good Apgar score complicated by a postpartum hemorrhage causing **a return to theatre and** resulting in an **obstetric hysterectomy**.

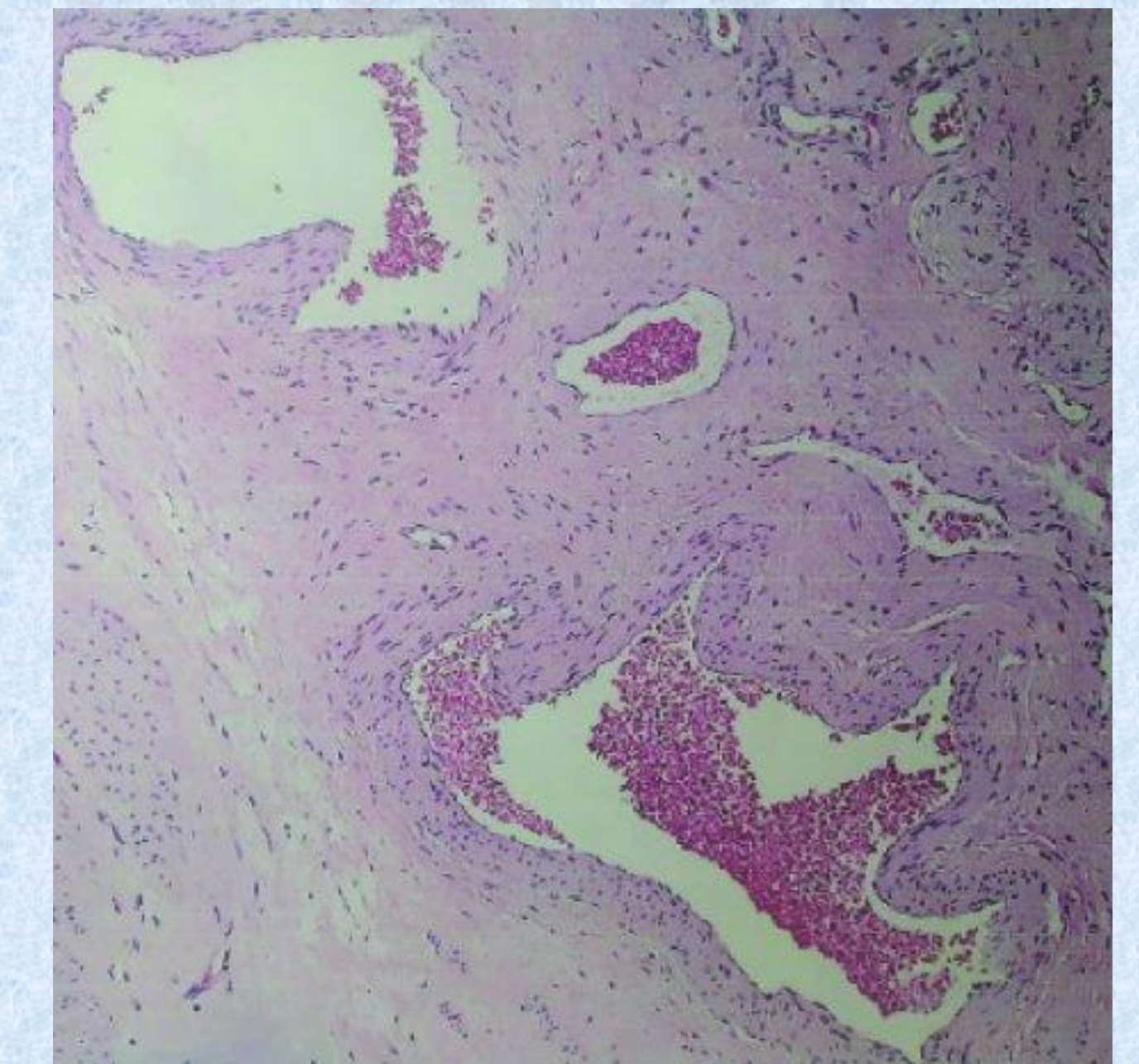
Patient was regularly **reviewed** in clinics - 13 Antenatal visits, 7 with a consultant and had no concerns during this period. She had **elective caesarean section at 38 weeks**.

Delivery was a difficult caesarean section secondary to adhesions requiring an upper segment incision. The Major obstetric hemorrhage protocol was activated. A **Bakri balloon** was inserted but blood loss reached 3.2L. The Patient underwent a subtotal hysterectomy, and the total blood **loss was 3.8 Liters** and she **was transferred to ITU**.

Patient was a high risk of PPH secondary to her age, BMI, previous PPH and c-sections. However, the Histology report showed "subinvolution of placental site". Full reports showed 'The myometrium revealed large, dilated superficial myometrium blood vessels with thickened walls at the placental implantation site indicative of "subinvolution of placental site".'

## DISCUSSION:

Subinvolution of placenta is an important cause of morbidity and mortality of young women. **PPH is an abrupt onset of increased uterine bleeding**, which prompts the patient to seek medical attention. The cause of subinvolution is **not known**. Clinical associations cited in the literature include multiparity, older age and pre-eclampsia.



Subinvolution of the placental site as the cause of hysterectomy  
(Ref: Researchgate.net)

## CONCLUSION:

Cause of PPH in this case was subinvolution of placental site (SPSSs) which is a **rare but severe cause of postpartum hemorrhage (PPH)**.

Surgical pathologists must be aware of the cardinal histopathologic findings of subinvolution, and this diagnosis must be considered in every hysterectomy specimen presented to the surgical.

Etiology of placental site subinvolution remains poorly characterized but it should be anticipated in multiparous, older age group with pre-eclampsia.