

FLUOROSCOPY FREE INTRAAORTIC BALLOON OCCLUSION IN A PATIENT WITH MORBIDLY ADHERENT PLACENTA ACCRETA IN PLANNED CAESAREAN HYSTERECTOMY



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- **Introduction:** Placenta Accreta Spectrum (PAS) is increasingly common and is PAS is associated with severe morbidity or mortality due to hemorrhage.
- The optimum method of hemorrhage control is uncertain and some prophylactic interventions require radiation exposure.
- We present a case in which an Intra-aortic occlusion balloon (IAB) was inserted prophylactically as part of a multidisciplinary approach to hemorrhage control in a case of morbidly adherent placenta undergoing caesarean hysterectomy.
- **Case Presentation:** 38year old G5P5 with 4 prior LSCS was diagnosed with placenta accreta with US and MRI. Following multi-specialty meeting a caesarean hysterectomy via a midline laparotomy incision was planned at 31 weeks.
- General anaesthesia, with invasive vascular access and a thoracic epidural was performed. Systemic vascular resistance was monitored using pulse contour analysis. Following induction of anaesthesia, IR accessed the right femoral artery and performed intravascular ultrasound (IVUS) evaluation of the aorta and iliac arteries to evaluate IAB landing zones. A suitably sized occlusion balloon was then advanced to the infrarenal aorta and secured into position. A test occlusion was performed and assessed by loss of oximetry signal in the toes.
- Post delivery, the occlusive balloon was inflated causing an increase in SVR of approximately 50%. Following hysterectomy the balloon was deflated.
- Total EBL was 900 ml, with 250 ml transfused back from cell saver with 2 L CSL. There was minimal hemodynamic instability throughout procedure, in particular no proximal hypertension or ischemia reperfusion related hypotension. There were no thrombotic or traumatic complications in relation to the device.

- **Discussion:** Historically, Placenta accreta is associated with Massive hemorrhage. In this case IAB was used as a component of a multispecialty approach to haemorrhage prevention.
- The protocol outlined has the benefits of no radiation, no need for transfer to an angio suite, and excellent aortic hemostasis. Further research is needed in this area particularly in relation to scope of deployment and duration of balloon occlusion in abnormal placentation where robust collaterals from other systemic arteries can be present.

References:

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