

# The role of Interventional Radiology in High Risk Obstetrics and Gynaecology

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## Introduction

- Bleeding - A major cause of morbidity and mortality
- Challenges in "Only surgery approach" – Very vascular fields, High BMI / Medical comorbidities / in DIC
- Potential for lower morbidity/costs & quicker recovery

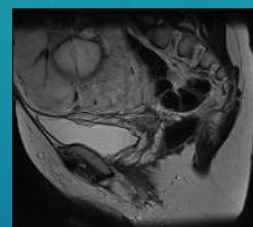
## Pros / Cons

- Decrease blood loss and help preserve uterus (Kidney et al, 2001; D'Souza et al 2015)
- Decrease blood loss in Anterior Placenta Praevia (Broekman et al, 2014)
- Safe and effective in massive PPH (Pennix et al, 2010)
- No sig decrease in blood loss in pts with Placenta accreta undergoing hysterectomy (Srivastava, 2007)
- Larger studies needed to confirm efficacy and safety (Dilauro et al, 2012)

## Patient A

DJ, 39yo G4P2 – 31+6 w

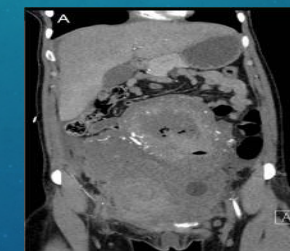
- Type 4 Placenta praevia with severe percreta + bladder invasion
- Multiple episodes of APH + Frank haematuria
- Classical CS + IIBAO, hysterectomy and partial cystectomy
- EBL 2000ml, 7U PC, 16U cryo, 1U plt



## Patient C

KJ 39yo, P1

- Post vaginal del, MROP and repair of 3° tear
- 2L PPH, 6U PRBC transfused before transfer
- Large right broad ligament haematoma
- 16U cryo, 1plt, 2U PRBC, MDT, Bilateral uterine A Emb - ICU, supportive care, no surgery needed



## Potential risks and challenges

- Iliac occlusion (0.5%); pseudoaneurysm (0.3%);
- Vessel remodeling & risk of dissection in pregnancy
- Ischaemia due to arterial thrombus, Reperfusion injury
- Puncture site problems, Pseudoaneurysm, Dissection
- Post Embolization syndrome (UAE) – Fever, Pain, nausea, vomiting

## Conclusions

- Interventional Radiology is a new tool to help bleeding patients
- Need for team work based on good communication, clear protocols, prompt action, senior input and staff education
- Need for larger studies to confirm the role of Interventional Radiology in Obstetrics and Gynaecology
- Key is to anticipate, organize, & act promptly to decrease the Incidence / severity of presentations
- Need for team work, good communication, and Education
- Need for measures to decrease CS safely, especially first CS.

## Patient B

KN, 30yo G5P3 at 34+2 w

- Placenta previa + percreta + ?involving bladder wall
- MDT - Anaes, OT, ICU, Urology, Haemat, Radiology / IR
- Classical CS + IIABO + Hysterectomy + UAE
- EBL = 800mL, ICU postop, Debrief

