



THE CHANGING ROLE OF INTERVENTIONAL RADIOLOGY IN OUR PLACENTA ACCRETA SPECTRUM (PAS) CAESAREAN SECTIONS AIMING TO MINIMISE BLOOD LOSS

Dr Jenna Bell (ST7 Anaesthetics), Dr Meena Agarwal (ST7 Anaesthetics) & Dr Richard Hartopp (Consultant Anaesthetist)
St George's University Hospitals NHS Foundation Trust, London

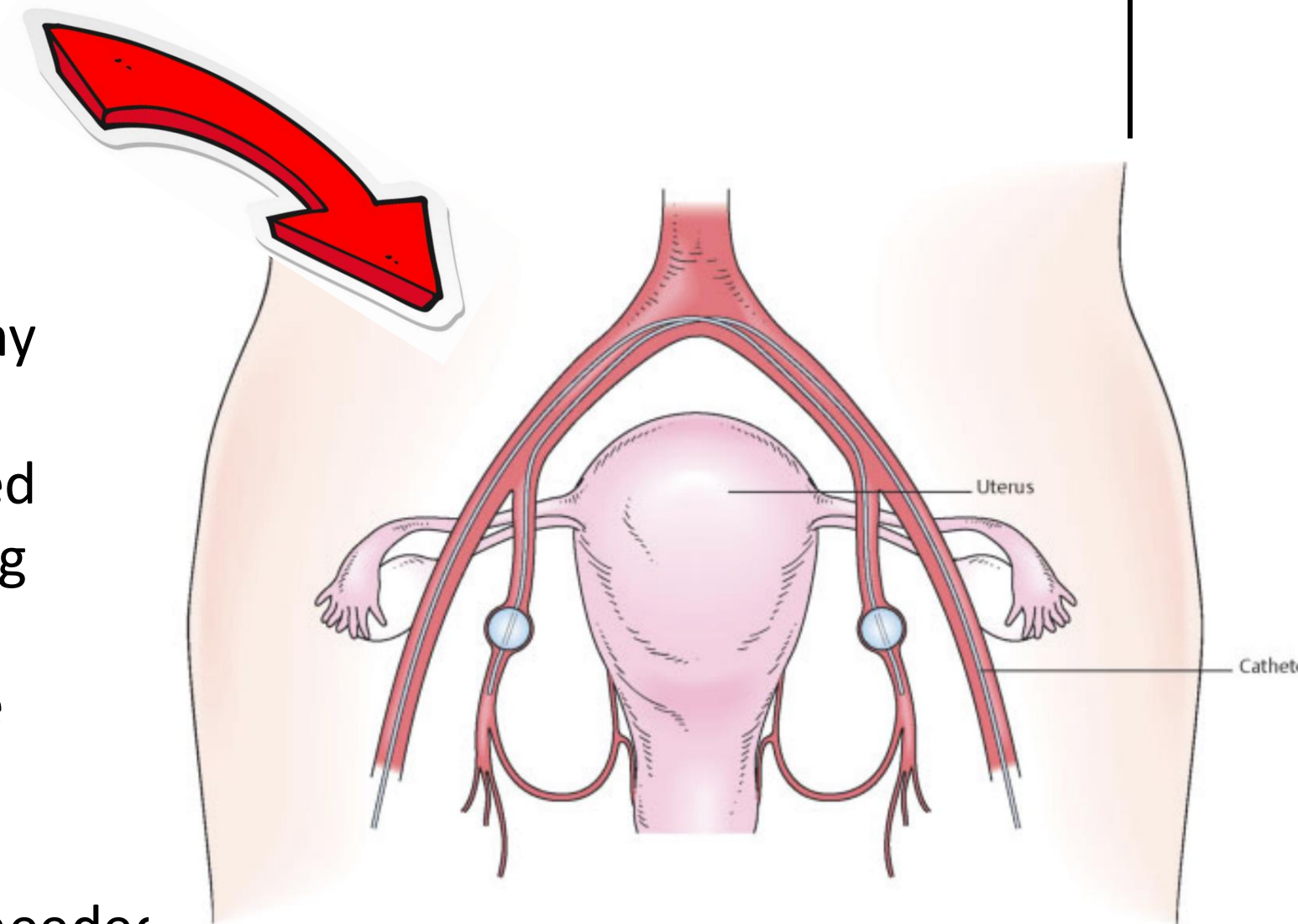


INTRODUCTION

Our PAS caesarean section service is increasingly busy
→ cases have **increased by 43% in the last year**

Key haemorrhage control technique:
→ prophylactic internal iliac balloon occlusion (PIIBO)

- IA balloons create some limitations:
- The patient's legs cannot be put in lithotomy position
 - Lower limb perfusion monitoring is required
 - Some patients have complications requiring intervention. [1]
 - Balloon insertion performed remote to the obstetric theatre
 - dislodgement risk during transfer
 - additional hours of procedural time needed to insert balloons



METHODS

Retrospective review of the **last 4 years** (2021-2024) of patients having caesarean section for suspected PAS in our service.

This project has been peer-reviewed and approved locally.



RESULTS

There is a clear trend of PIIBO being used less in the last 4 years and an increasing rate of planned hysterectomy. [Figure 1]

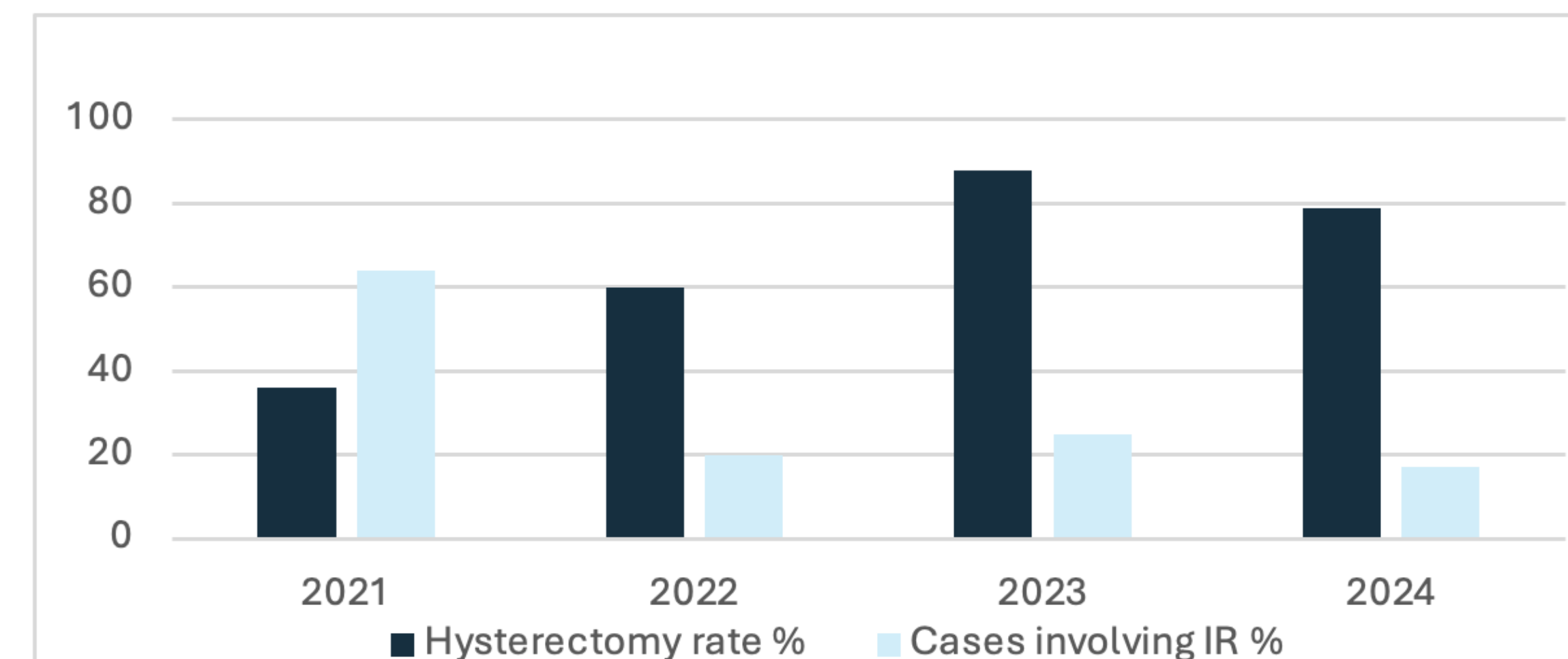
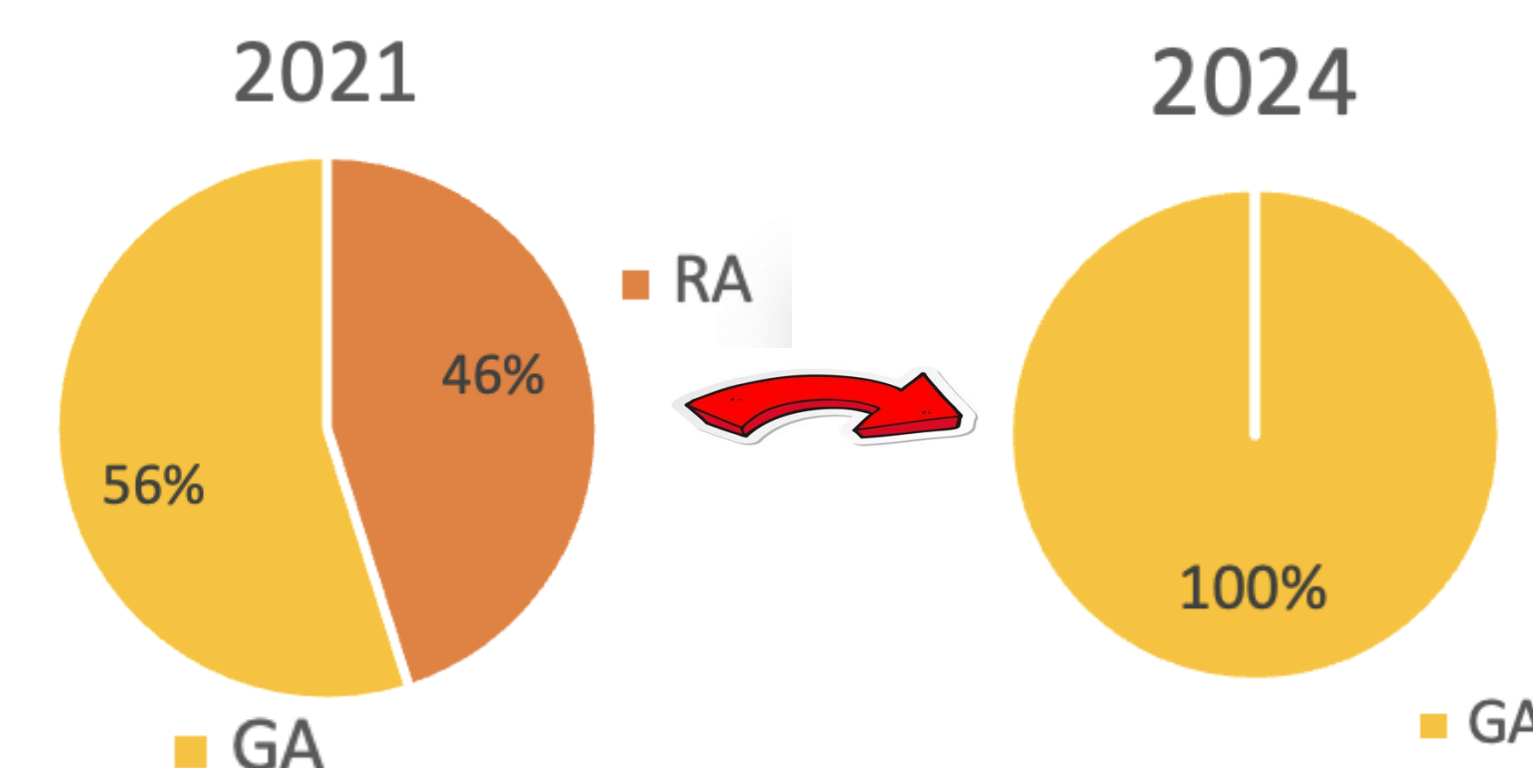


Figure 1: Contrasting hysterectomy rate and IR use

In 2024 65% of patients with confirmed PAS had a planned hysterectomy and the additional 14% of hysterectomies were intra-operative decisions to control haemorrhage.

Intraoperative blood loss in 2024 was 61% less than 2021 (3968ml vs 6380ml).



All patients had a general anaesthetic (GA) in 2024 vs 54% in 2021



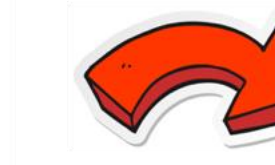
DISCUSSION

The surgical move towards hysterectomy without PIIBO has impacted anaesthetic management.

- Previously, patients would usually have an **epidural sited before transfer** to radiology. In obstetric theatres the de novo epidural would be topped up +/- a GA. Later the patient would **return to radiology** for balloon removal.
- Without PIIBO the patient is **not transferred to remote sites**, reducing the risk of adverse events.

Many feel that the patient experience is better with a GA however there are neonatal implications. [2]

CONCLUSION



Collation of patient data with other referral centres for PAS management would create a consensus picture on management and be an important step in future PAS anaesthetic practice.

REFERENCES

1. Osman A, Das R, Pinas A, et al. Outcome evaluation of prophylactic internal iliac balloon occlusion in the management of patients with placenta accreta spectrum. *CVIR Endovascular*. 2024; 7:57.
2. Hawkins R, Evans M, Hammond S, et al. Placenta accreta spectrum disorders - Peri-operative management: The role of the anaesthetist, Best Practice & Research Clinical Obstetrics & Gynaecology. 2021; 72: 38-51.