'Is being awake the way forward' for the anaesthetic management of Placenta Accreta Spectrum? – A cohort study of 53 women in a UK tertiary centre

Christine James MBBS, MSC, BSC(Hons), FRCA, Nhathien Nguyen-Lu BMedSci(Hons) BMBS, FRCA. Guy's and St Thomas' NHS Foundation Trust, London, UK (GSTT) - Department of Anaesthetics

- Placenta Accreta Spectrum (PAS) is the major iatrogenic public health problem of the 21st Century
- There is no standardised anaesthetic protocol for managing PAS
- PAS terminology is diverse
- This cohort study examined the role of Regional Anaesthesia (RA) on related maternal and neonatal PAS outcomes
- The study reflects on whether RA should be universally adopted as the optimal approach





Fig 1. Placenta Accreta Spectrum

Study Design and Methods

- Data collected prospectively of all women who presented with PAS 2015-2024
- Used the electronic records for maternity patients
- Maternal data captured was:
 - Patient demographics
 - Surgical
 - Interventional Radiology (IR)
 - Anaesthetic methods \bullet
 - Admission length \bullet
- Neonatal data captured was:
 - Gestation
 - APGAR score
 - Where neonate went post-delivery (i.e. remained with mother or neonatal unit) \bullet
 - Skin-to-skin contact \bullet



'Is being awake the way forward' for the anaesthetic management of Placenta Accreta Spectrum? - A cohort study of 53 women in a UK tertiary cent

Results

Table 1: Demographics, anaesthetic surgical management of obstetric patients with PAS			
	Overall (n=53)	Regional Anaesthesia (n=43)	General Anaesthesia (n=10)
Age (yrs)	37.0 (4.5)	38 (6)	35 (4)
Gravida and Para	3(2-18) + 2(0-9)	7 (2) + 2(2)	5(5) + 2(1)
Previous CS	46(86%)	37 (86%)	9 (90%)
Hysterectomy	20 (38%)	14 (26%)	6 (60%)
Blood loss (L)	3 (2.2)	2.5 (0.6-6.5)	4.9 (1.5-11.6)
PRBC (Units)	1.9 (2.2)	1.7 (0-9)	5.3 (0-18)
FFP (Units)	1.6 (2.0)	1.4 (2.2)	3.8 (4.2)
Platelets (pools)	0.1 (0.3)	0.2 (0.3)	1 (2.6)
Cryo (packs)	0.4 (0.9)	0.4 (0.8)	0.8 (1.3)
Cell salvage (mLs)	190 (314)	187 (312)	203 (339)
Length of stay	6 (3.6)	6 (3.3)	8 (4)
ITU admission	5 (9%)	2 (5%)	3 (30%)
Surgical time (mins)	166 (78.8)	162 (80)	188 (68)
Values are expressed as n (%) mean (standard deviation) median (range)			

Values are expressed as n (%), mean (standard deviation) median (range) Key: Packed red blood cells PRBC, Fresh frozen plasma (FFP) caesarean section (CS) intensive therapy unit (ITU)





Fig 2. The anaesthetic method for elective or emergency placenta accreta cases

- Neonatal outcome for RA was assessed with a median gestation of 36 weeks
- Median Apgar score was 9
- 84% of neonates remaining with their mother
- 74% able to have skin-to-skin contact at delivery

Conclusion and Discussion

- RA had multiple benefits for PAS patients
- Reductions seen in:
 - Blood loss
 - Admission to ITU
 - Length of hospital stay \bullet
- Maternal experience was improved for patients who had regional anaesthesia, by: Enabling bonding through skin-to -skin at delivery \bullet
- - Better Apgar scores
 - Reduced admissions to neonatal units \bullet
- We advocate RA as the preferred anaesthetic mode for PAS patient management There needs to be standardised terminology to make comparison between centres easier

References:

- Einerson, B., Gilner, J.B. and Zuckerwise, L.C.. Placenta Accreta Spectrum. Obstetrics and Gynecology. 2023;142: 31–50. 1.
- Jauniaux E, et al. FIGO Placenta Accreta Diagnosis and Management Expert Consensus Panel. FIGO classification for the clinical diagnosis of placenta accreta spectrum 2. disorders. Int J Gynaecol Obstet. 2019;146:20-24.
- Case courtesy of Frank Gaillard, Radiopaedia.org, rID: 167145 3.



