NHS Oxford University Hospitals NHS Foundation Trust

Obstetric Anaesthetists' Association

Obstetric Anaesthesia Annual Scientific Meeting

Belfast

Thursday 15 - Friday 16 May 2025, International Convention Centre (ICC), Belfast

The multidisciplinary management of aneurysmal subarachnoid haemorrhage at term

Tom Grant, Sally Anne Shiels

John Radcliffe Hospital, Oxford, UK

Preoperative notes and plan

41/40 transfer to tertiary centre from DGH

Age: 26 | Weight: Height: 76kg | ASA: 3E

M/F: F | OD: Immediate, urgent, expedited,

Procedure(s) proposed:

Caesarean delivery + EVD

Anaesthetist's preoperative assessment by Dr ..... (date: / / time) Midnight

- 1 day ago sudden onset severe headache
- Normal MRV at that time, Δ migraine
- Collapse today, Δ acute large volume SAH,
- GCS 15, nil focal deficit, Normal CTG

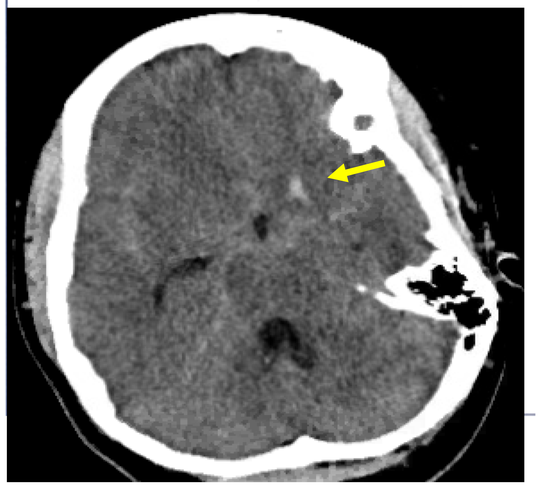


Figure 1. Presenting CT head, post-collapse

The risk of stroke among pregnant and postpartum women is around **three times greater** in comparison with non-pregnant women of similar age, and is the **most frequent cause** of serious long-term disability after pregnancy[1].

Induction

Location: Neuro theatres with 5 teams
1) Obstetricians 2) Neurosurgery 3) Neonates 4) Obs Anaes 5) Neuro Anaes
Prep: Awake arterial line, draped pre induction
GA: Modified RSI propofol + remifentanil, rocuronium + phenylephrine
Uneventful intubation (VL) Maintenance: TIVA

Summary

Healthy male infant born 4 minutes after knife to skin
Cardiovascular stability throughout
Total obstetric operating time: 54 minutes followed by extraventricular drain (EVD), EBL 500mL
Skin to skin under GA facilitated at request of mother

Outcome

Remained intubated and ventilated on neuro ICU post-operatively
Angiography and successful clipping of 7mm ICA aneurysm later that morning
Discharged from neuro ICU following day
Uncomplicated two-week admission

Follow-up

9 month follow-up:
Some fatigue and intermittent headache
No other neurological sequelae

Key factors contributing to favourable outcome

- **DGH Team: prompt identification of a neurosurgical emergency**
- **Rapid transfer to definitive care**
- **Appropriate consideration of term pregnancy, however decisions not impeded by this**
- **Anaesthetic and theatre teams from both sub-specialties**
- **Combined experience of routine practice to perform to a high standard in the service of mother and baby, even out of hours**
- **Facilitating skin to skin with neonatal team**

Reference

1. Elgendy, S. Bukhari, A. Barakat et al. Maternal Stroke: A Call for Action. *Circulation.* 2021; 143:7