The role of routine day 2 FBC in postoperative care of women with caesarean sections – is it really necessary?

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Introduction

- International and national guidelines do not recommend a routine postoperative day 2 (POD2) FBC. However, it has become custom and practice in our hospital.
- It is important we utilise all our resources efficiently and effectively.
- We carried out an audit to evaluate the clinical usefulness of taking a POD2 FBC on all women who delivered by caesarean section in May 2024.
- Could we replace this FBC with an FBC taken at 28 weeks? A 28-week FBC would add more value to the woman's journey and allow us diagnosis anaemia and treat appropriately.

Materials and Methods

- A retrospective audit was conducted using the Laboratory computer system, hospital computer system and the patient charts, to identify women who had a section (Elective and Emergency) in May 2024.
- Risk factors contributing to anaemia where identified see Table 1.

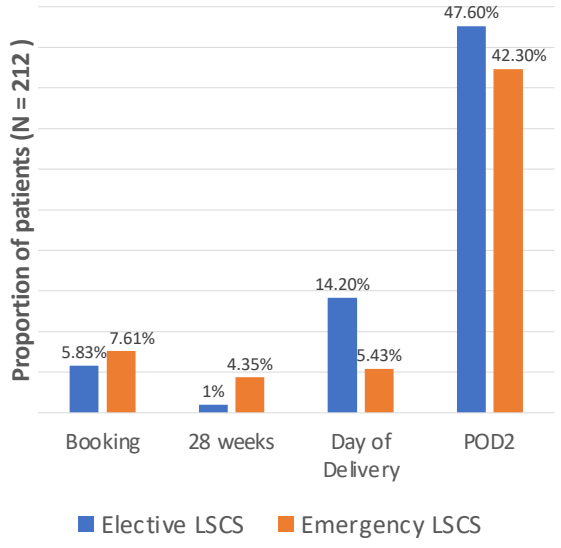
Table 1: Risk factors for anaemia in pregnancy

History of untreated anaemia
Bleeding disorders
Risks for PPH:
Previous LSCS
Placenta accreta syndrome
Multiple pregnancy
Fibroids
Polyhydramnios
Macrosomia
Pre-eclampsia
Fetal demise

Results

- 567 Women delivered in May 2024.
- 212 where delivered by section (120 elective and 92 by emergency).
- 17 women (3%) had a blood transfusion, of which only 4 women delivered by Caesarean section.
- All women had an FBC at booking and day of delivery.
- 184 (87%) had a 28-week FBC, 206 (97%) had a POD2 FBC.
- Unsurprisingly there is a higher incidence of anaemia in the postnatal period (Graph 1).
- The biggest pre-existing risk factor for PPH was fibroids and placenta previa.
- Indication for blood transfusion:
  - Symptomatic anaemia (2 women)
  - PPH (2 women)

Graph 1: Anaemic patients (Hb less than 10g/dl)



Conclusion

- POD2 FBC offers very little value to the woman's journey.
- POD2 FBC is not required unless patient had risk factors such as: symptomatic anaemia, experienced a postpartum haemorrhage (over 1L blood loss) or have pre-existing risk factors.
- There is an opportunity to redirect these resources to a 28-week FBC which would allow use to treat anaemia and reduce the risk of blood transfusion.

References
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