

Caesarean Sections: How painful are they when the block is ‘working’? An audit of our current practice

Authors: Dr Patrick Liddicoat¹, Dr James Brooks¹ and Dr Ben Gupta²;
1 Anaesthetic Registrar, 2 Anaesthetic Lead for Obstetric Anaesthesia, St Michael’s Hospital, University Hospitals Bristol and Weston NHS Foundation Trust

Introduction

There is a well-established incidence of pain during caesarean births (CB) [1] under regional anaesthesia (RA), sometimes requiring conversion to general anaesthesia (GA). This can cause psychological sequelae for the patient and is also the leading cause of litigation in anaesthesia [2] and as such presents a cost in terms of time and money to healthcare systems.

We present a retrospective audit of the current incidence and aetiology of pain during CB in 2495 patients at a tertiary UK obstetric hospital over an 18 month period.

Methods

We assessed every CB over an 18 month period from March 2021 to September 2022 (2495 patients). We included all cases where:

1. An anaesthetist assessed the neuraxial block, after testing, as suitable for surgery and;
2. The patient then suffered pain requiring treatment during the subsequent operation.

We audited our results against the RCoA Audit Recipe book [3] and a recent guideline issued by the Association of Anaesthetists [2].

Type and location of pain	Total
Pressure/Stretching	28
General Discomfort	23
Sharp Pain	14
Shoulder Tip Pain	6
Localised Abdominal Pain	5

Figure 1: The type and location of pain experienced during a CB

Discussion

The incidence of pain during CB under RA and conversion to GA was similar to previously documented in our centre [1]. Figures 1 and 2 display a wide variety of experiences of pain. There is limited research on intra-operative patient pain experiences and this is could be an area for future research.

Block checks were commonly carried out using Ethyl Chloride spray and not using light touch; at odds with recent guidance [2]. Concerningly, pre-operative consent for pain during CB was poor for ETU possibly because more ETUs take place in the emergency setting. Both of these points are clear areas for improvement and are the subject of current educational drives and we look forward to sharing our results at future meetings.

Results

- 141 patients (5.7%) had pain during a CB.
- Epidural Top Ups (ETU) had an incidence of pain of 12.7% vs spinals 3.7%; this varied little with category of CB.
- Figure 1 and 2 display the type and location of pain and the surgical trigger, respectively.
- Only 44% of patients were consented for pain during CB under ETU compared to 92% under spinals.
- Light touch was only used to test the block in 1% of ETU and 15% of spinals.
- The overall incidence of conversion to GA in these 141 patients was 11% for ETUs and 21% for spinals.

Surgical Trigger	Total
Paracolic Gutters	22
Uterine Exteriorisation	7
Uterine Rub	7
Knife to Skin	5
Skin on Closing	5

Figure 2: The surgical trigger of pain during a CB

References

1. SM Kinsella. A prospective audit of regional anaesthesia failure in 5080 Caesarean sections. Anaesthesia. August 2008. Vol 63, issue 8: p822-832
2. F. Plaat et al. Prevention and management of intra-operative pain during caesarean section under neuraxial anaesthesia: a technical and interpersonal approach. Anaesthesia. May 2022. Vol 77, Issue 5: p588-597
3. Royal College of Anaesthetists. Raising the Standard: a compendium of audit recipes. 3rd edn. 2012.