

Pain During Caesarean Section: Assessment, Management and Follow-Up in a Tertiary Maternity Hospital

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INTRODUCTION

With the majority of caesarean sections in Ireland and the UK now carried out under regional (spinal, epidural or combined spinal-epidural) anaesthesia, the risks associated with obstetric general anaesthesia, previously one of the top causes of maternal mortality, have been largely controlled. But in their place has risen the spectre of pain during caesarean delivery, now almost certainly the commonest successful negligence claim against anaesthetists.

Methods

- Retrospective cohort study of all patients reporting pain during CS identified from HER (Jan-Dec 2020)
- Review completed on HER post-discharge from hospital via medical records
- Audit application & ethical approval obtained

Participants:

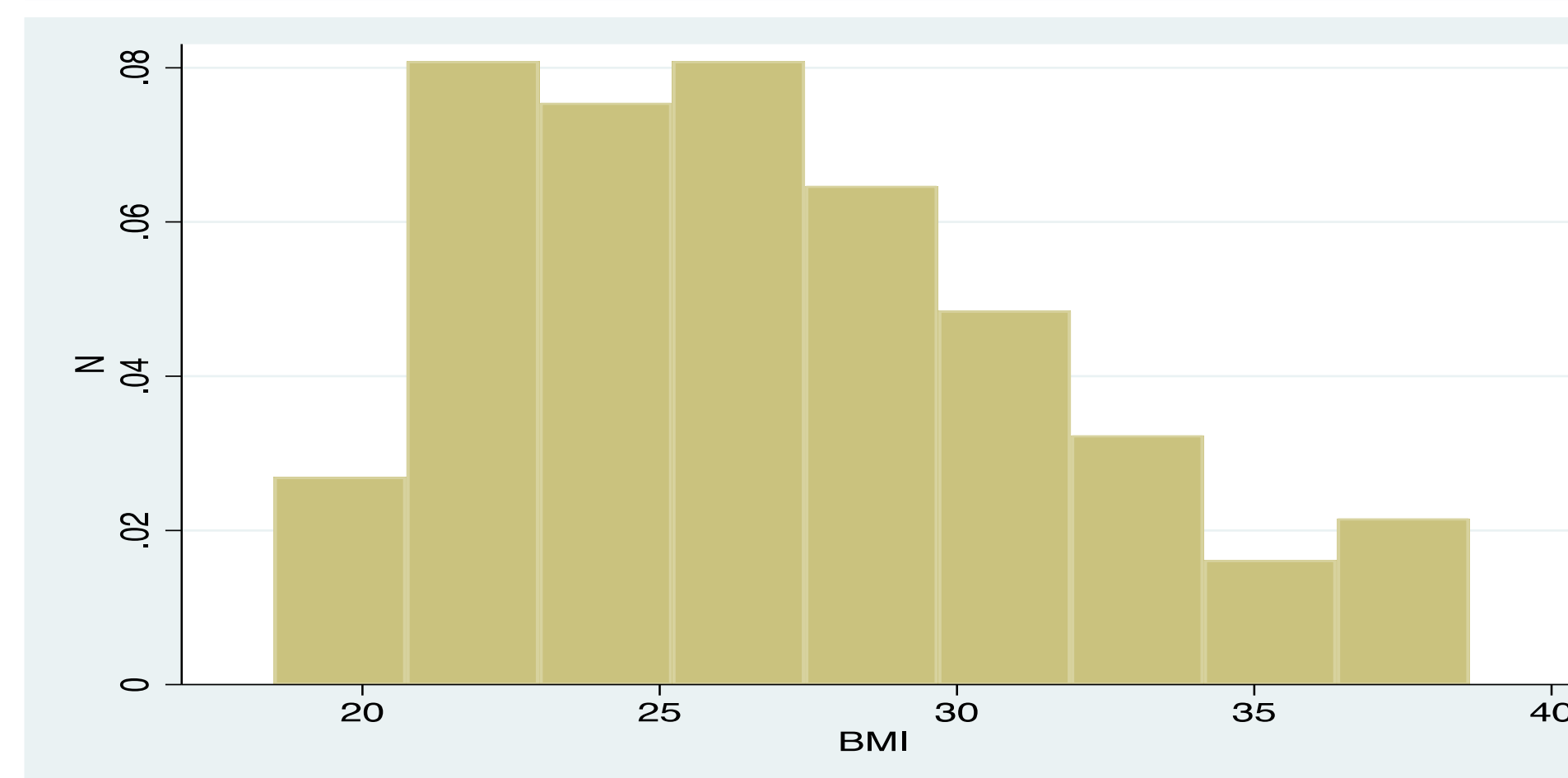
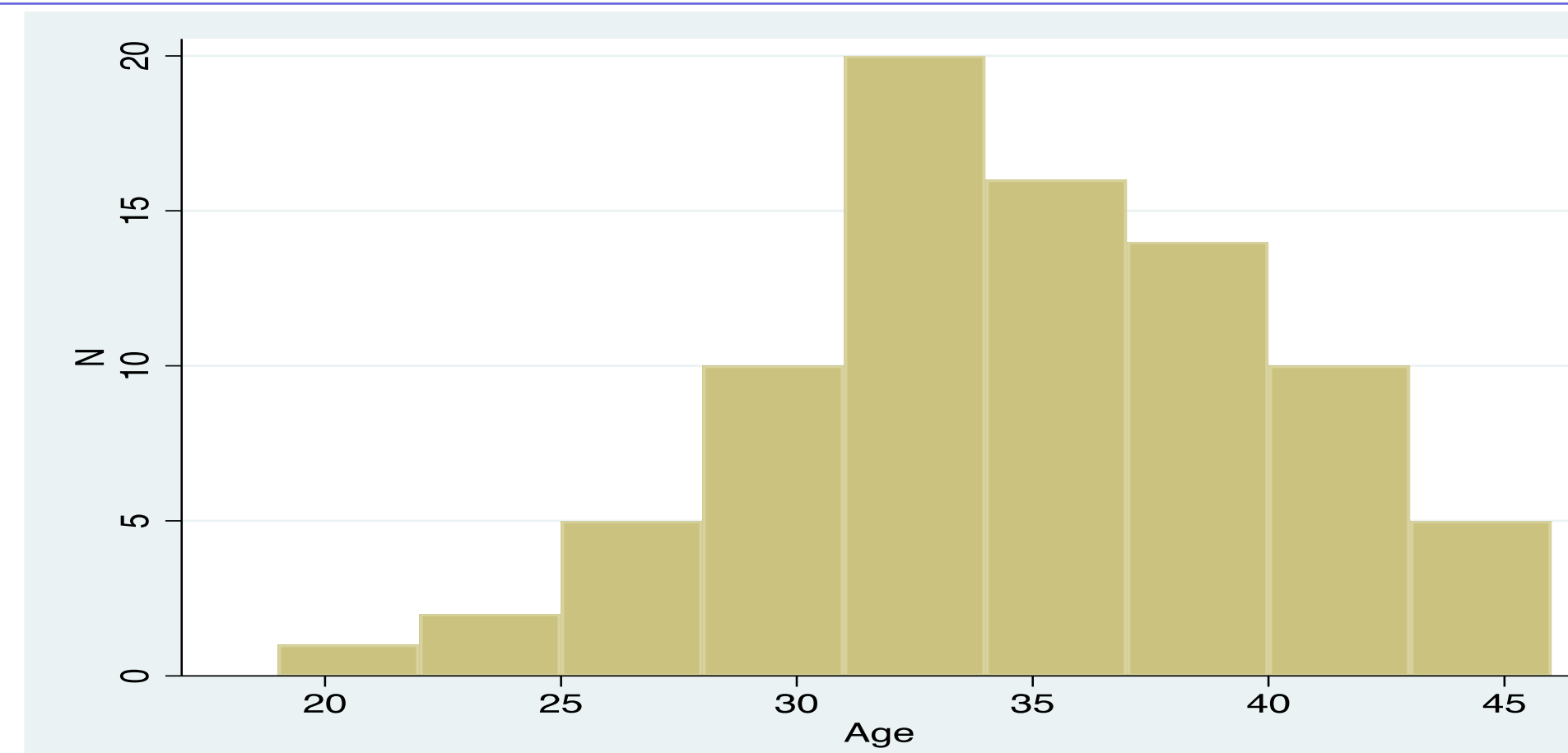
- 83 women experiencing pain during CS
- Estimated overall incidence 3.7%
- 83/88 patients included in audit overall
- Age: 34.4 years, 15 (18%) aged >40 years
- BMI >25 in 58%, mean weight 72.3kg

Parity:

- Nulliparous 45% (37/83)
- Multiparous (no previous CS) 22% (18/83)
- Multiparous (with previous CS) 34% (28/83)

CS Category:

- Category 1: 10% (8/83)
- Category 2/3: 46% (38/83)
- Category 4: 39% (32/83)
- Unknown: 6% (5/83)



DOCUMENTATION

Consent documentation:

- Surgical: 78% (65/83)
- Anaesthesia: 55% (46/83)
- Nursing 88% (73/83)

Risks discussed on Pre-Anaesthesia Evaluation Form:

- Pain not discussed: 55% (45/83)
- No form in notes: 45% (38/83)
- Conversion to GA risk discussed: 49% (41/83)
- Conversion to GA risk not discussed: 5% (4/83)
- Consent not found: 46% (38/83)

NEURAXIAL TECHNIQUE USED

Initial Mode of Anaesthesia:

- Spinal anaesthesia: 60% (50/83)
- Epidural Top-Up 37% (31/83)
- Combined Spinal epidural 2% (2/83)

Block height assessed with:

Ethyl chloride spray: 90% (75/83)

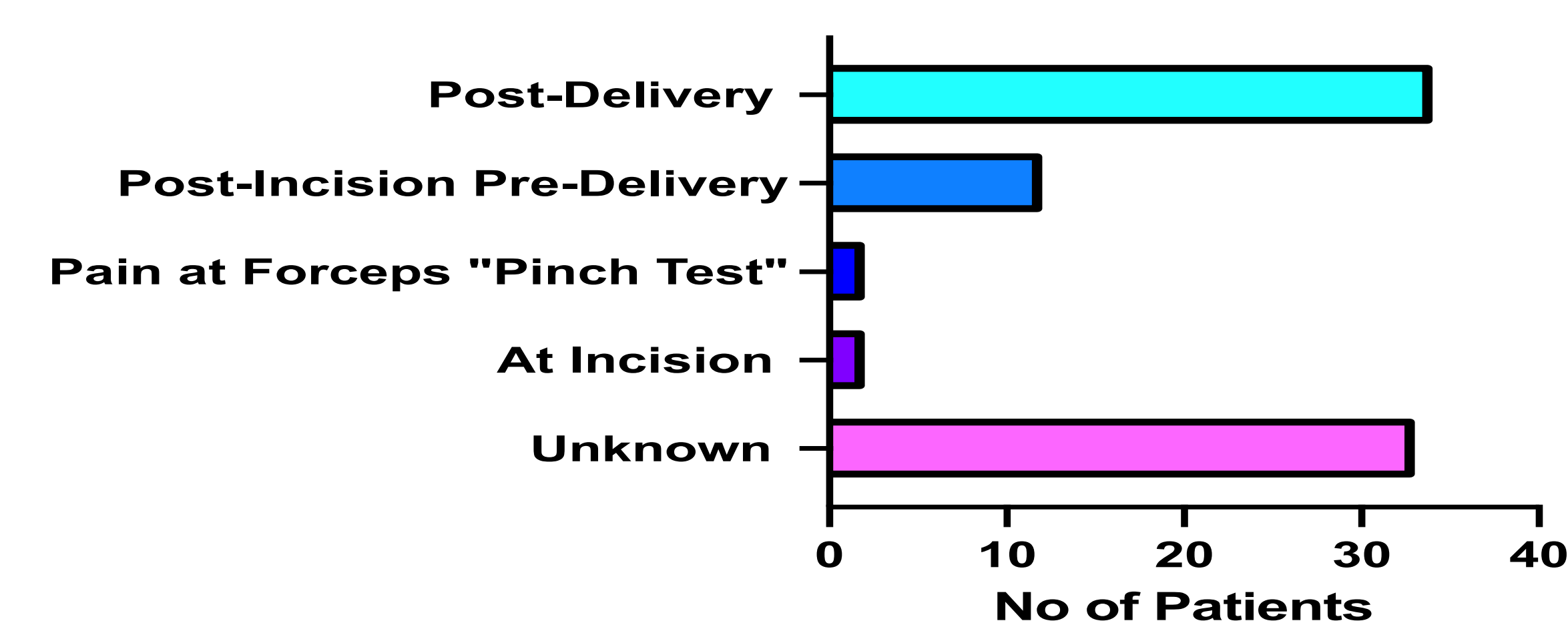
Straight leg raise: 18% (15/83)

Forceps pinch test: 5% (4/83)

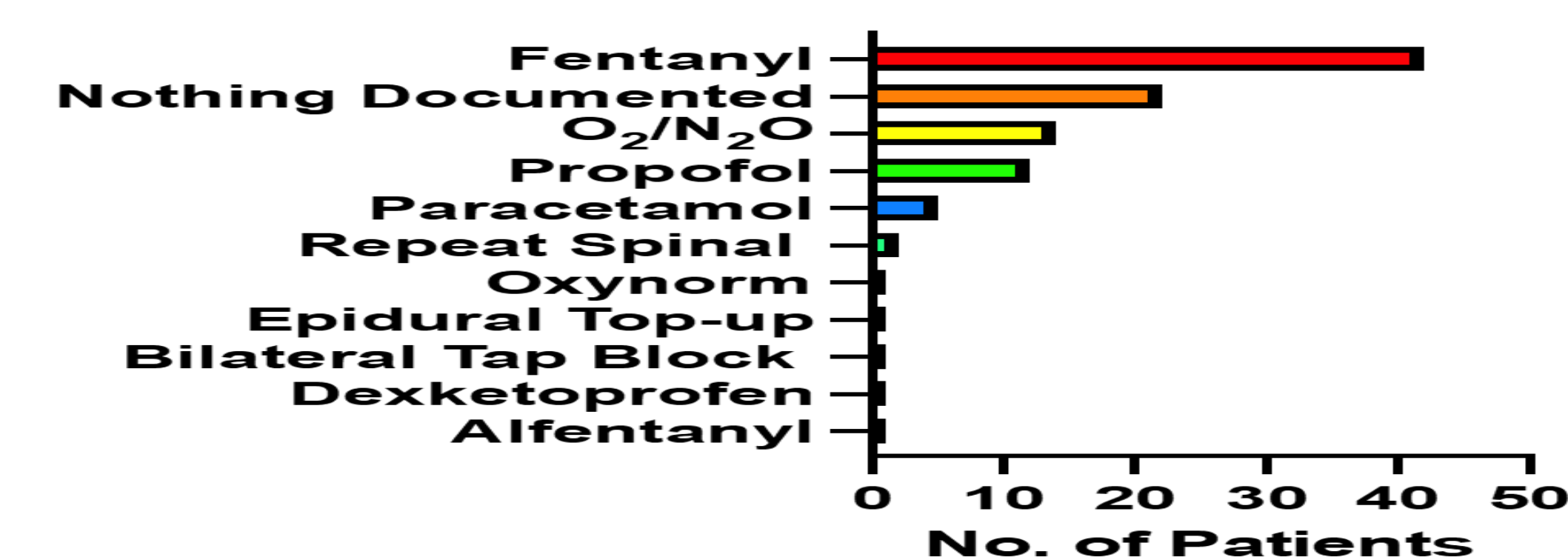
No documented assessment: 10% (8/83)

Multiple modalities: 22.9% (19/83)

Stage at Which Pain Reported



Alternative Analgesics Offered



Key Findings:

- Objectively assessing adequate neuraxial blockade is challenging
- Documentation of risk is inadequate in practice
- Approach to patient experiencing pain during CS is difficult
- Guidance on how to approach and manage patients experiencing pain is an area for future development

Critically, adequate communication, documentation and follow-up is essential

- From a patient care and medico-legal perspective
- Should inform future practices

Practice already changing: Immediate Follow-Up, Guidelines currently under development in our institution, plans to re-audit in the future

Alternative Analgesia Offered:

- Yes: 73% (61/83)
- None (straight to GA): 5% (4/83)
- Spinal repeated: 2% (2/83)
- No alternative documented: 19% (16/83)

General anaesthesia Offered:

- GA Offered & Declined: 39% (32/83)
- GA not Offered: 57% (47/83)
- Spinal repeated: 5% (4/83)

Ultimate pain management outcome:

- Managed without GA: 95% (79/83)
- Converted to GA: 5% (4/83)

Bogod D. Pain during caesarean stlion. BJOG. 2016 Apr;123(5):753. doi: 10.1111/1471-0528.13845. PMID: 27149347.

Plaat F, Stanford SER, Lucas DN, Andrade J, Careless J, Russell R, Bishop D, Lo Q, Bogod D. Prevention and management of intra-operative pain during caesarean section under neuraxial anaesthesia: a technical and interpersonal approach. Anaesthesia. 2022 May;77(5):588-597. doi: 10.1111/anae.15717. Epub 2022 Mar 24. PMID: 35325933; PMCID: PMC9311138.