

# Pain during cesarean section

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# Cesarean section

- One of the most common operations in the world!
- Neuroaxial anesthesia is the gold standard mode of anesthesia
- The reported prevalence of inadequate or failed neuraxial anaesthesia varies widely



## **Susanna Stanford**

**New York Times podcast ‘The Retrievals’**

*Any discomfort I might’ve felt [...] has been worth it because of the responses from women”*

*“There is no other surgery where intraoperative pain is ever accepted. None”*

# Failure of communication: a patient's story

*Stanford, Susanna E.R. et al.*

*International Journal of Obstetric Anesthesia, Volume 28, 70 - 75*

- **Highlights**

- Pain felt during caesarean section can cause long-lasting emotional trauma.
- Good communication between patient and anaesthetist is essential.
- Equality in the doctor-patient relationship may be difficult to achieve in theatre.
- Anaesthetists should offer an apology and explanation when a complication occurs.
- Anaesthetists should ensure that other carers are informed of complications.

- **Guidance**

- Minimal standard for testing
- Management of break-through pain
- How to follow-up afterwards

## **I feel pain, not pressure: a personal and methodological reflection on pain during cesarean delivery**

Rachel Somerstein, PhD, MFA



Check for updates

In the operating room, I was given a spinal.

When the obstetrician began to operate, I told him: "I felt that."

He responded: "You'll feel pressure."

"I felt that," I said again.

He continued to operate.

I cannot adequately describe the pain that I experienced. Suffice to say that it was significant enough that the obstetrician wrote about it

at length in his notes. "The patient was having a great deal of difficulty, tolerating pain, was indicating that she was having a great deal of difficulty coping with the pain and was screaming from the pain."

I saw my legs kick above the drape.

"She was moving her legs quite a bit as well," the doctor wrote, "and general anesthesia was being discussed.... The patient after baby was delivered continued to have a great deal of pain and was converted to general anesthesia at that point."

2016

- Post-traumatic stress syndrome
  - Avoiding medical and dental care
  - Avoiding another pregnancy
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- Studies on pain during CS have previously relied on surrogate measures

## Review Article

# Inadequate neuraxial anaesthesia in patients undergoing elective caesarean section: a systematic review

**R. Patel,<sup>1</sup>  J. Kua,<sup>1</sup>  N. Sharawi,<sup>2</sup> M.E. Bauer,<sup>3</sup> L. Blake,<sup>4</sup> S. R. Moonesinghe<sup>5</sup> and P. Sultan<sup>6</sup> **

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6 Associate Professor, Department of Anesthesiology, Peri-operative and Pain Medicine, Stanford University School of Medicine, Stanford, CA, USA.

- **Fifty-four** randomised controlled trials were included (3497 patients).
- The overall prevalence of requirement for **supplemental analgesia** or anaesthesia was **14.6%** (95%CI 13.3–15.9%); 510 out of 3497 patients.
- Everything from **brief nitrous oxide to conversion to general anesthesia.**
- The prevalence of **general anaesthesia conversion** was **2 out of 3497** patients (0.06% (95%CI 0.0–0.2%)).
- **Spinal/combined spinal–epidural anaesthesia was associated with a lower overall prevalence of inadequate neuraxial anaesthesia than epidural anaesthesia** (10.2% (95%CI 9.0–11.4%), 278 out of 2732 patients vs. 30.3% (95%CI 26.5–34.5%), 232 out of 765 patients).
- **Elective cesarean sections!**



Contents lists available at [ScienceDirect](#)

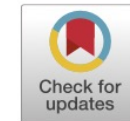
# International Journal of Obstetric Anesthesia

journal homepage: [www.elsevier.com/locate/ijoa](http://www.elsevier.com/locate/ijoa)



## Original Article

# Inadequate neuraxial anaesthesia during caesarean delivery: a survey of practitioners



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- Survey at the **OAA meeting in 2021**
- **456 participants** logged in
- **356 provided responses** (but not to all 13 questions)
- Routine for respondents to inform patients about the **difference between pain and expected intra-operative sensations** (320/327, **97.9%**)
- Routine to inform patients of the **risk of intra-operative pain** (204/260, 78.5%), or the **possibility of conversion to general anaesthesia** (290/309 **93.8%**).

- **30%** of respondents reported the use of **written guidelines** for follow-up of patients who experience intra-operative pain under neuraxial anaesthesia
- **23%** reported formal **training in management of intra-operative pain** under neuraxial anaesthesia.
- Respondents felt that
  - inadequate block duration
  - prolonged surgery
  - patient anxietywere contributory factors to failed anaesthesia
- Modalities used to test a block were **cold, motor block and light touch, with approximately 65%** of respondents routinely using three modalities.

## Guidelines

# Prevention and management of intra-operative pain during caesarean section under neuraxial anaesthesia: a technical and interpersonal approach

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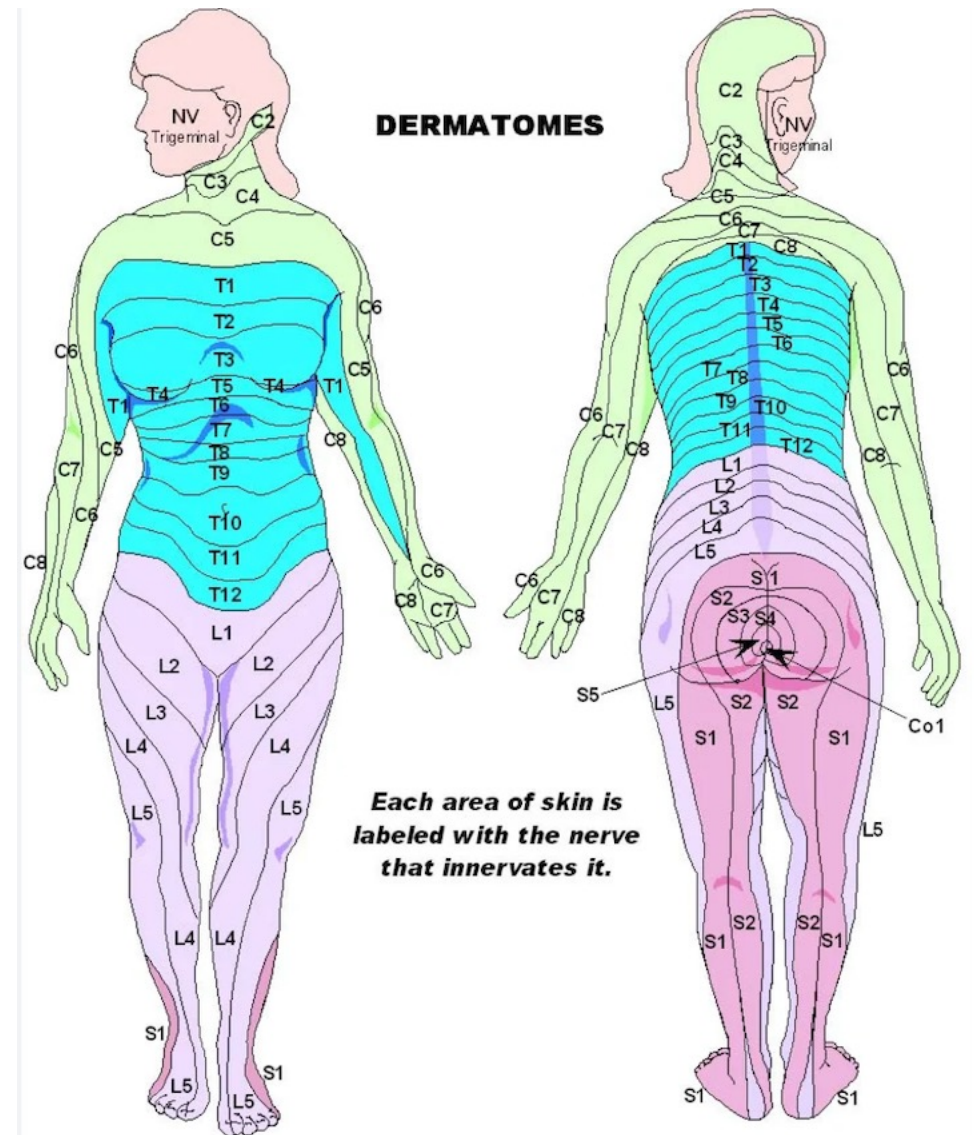
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# Recommendations

- Use light touch as the primary testing modality, aiming for a block to sensation to T5 or higher.
- Use straight leg raising as a test for motor block. An effective block is indicated by the inability to straight leg raise against gravity bilaterally.
- Sharp pinprick - cold - touch



# How do you check your neuroaxial anesthesia?

- Not at all, it always works
- According to recommendations previously mentioned
- With light touch
- Cold, sharp pin prick and motor block

# In case of pain during CS - guideline

- Acknowledge the patients distress.
- Stop surgery as soon as it is safe to do so.
- Consideration should be given to a second neuraxial technique (in the case of spinal anaesthesia) or extending the neuraxial technique (in the case of combined spinal–epidural or epidural extension anaesthesia). If these options are not possible, general anaesthesia should be recommended.
- Consider repeated boluses of fentanyl 25–50 mcg, alfentanil 250–500 mcg or ketamine 10 mg boluses.
- Additional top-ups could be considered. Alkalinised lidocaine with adrenaline is likely to achieve the most rapid effect.
- Avoid exteriorisation of the uterus.

Questions and comments?