

Unveiling Meralgia Paresthetica: Rare Complication After Failed Spinal Anaesthesia in C-Section

Dr Olfat Abdelrahman , Dr Hashem Elhossamy ,Dr Vandana More
^{1, 2} The Dudley Group NHS Foundation Trust

Introduction

Meralgia paresthetica presents as pain, tingling, and numbness over the anterolateral thigh, resulting from entrapment of the LFCN at the inguinal ligament. Failed spinal anaesthesia for C-section which may predispose patients to MP due to prolonged operating time, additional manipulation, or positioning adjustments.

Discussion

This case highlights the interplay of multiple risk factors in the development of MP following failed spinal anaesthesia for C-section:

- Repeated Spinal Attempts: May have contributed to LFCN mechanical irritation.
- Prolonged Supine Positioning: Compression of the LFCN under the inguinal ligament was likely exacerbated by retractors.

MP after failed spinal anaesthesia is an underrecognized complication. Diagnosis is primarily clinical, supported by imaging and nerve conduction studies. Conservative management typically leads to resolution, but awareness and preventive measures are crucial.

Case report

Patient Profile

A 31-year-old woman, gravida 1 para 1, underwent an emergency caesarean section.

Clinical Background

The procedure was performed under spinal anaesthesia following a failed epidural and an initial unsuccessful spinal attempt. Postoperatively, the patient began to experience localized burning pain, paraesthesia, and numbness over the anterolateral aspect of her right thigh.

Postoperative Course

By postoperative day 2, the patient reported a burning and tingling sensation over the right thigh, along with a dull ache extending from the right hip to the back. This discomfort would occasionally intensify into a sharp, electric shock-like pain.

Examination Findings

- **Neurological Assessment:** Sensory loss localized to the distribution of the lateral femoral cutaneous nerve (LFCN).
- **Motor Function:** Intact and symmetrical.

Diagnostic Evaluation

- **Electromyography (EMG):** Confirmed LFCN dysfunction, consistent with meralgia paresthetica.
- **Ultrasound:** No abnormalities detected.
- **MRI:** No pelvic or spinal pathology observed, except for a swollen right-sided LFCN.

Management Plan

- **Medications:** Gabapentin for neuropathic pain and Ibuprofen for inflammation.
- **Lifestyle Advice:** Avoid tight clothing and prolonged standing.
- **Physiotherapy:** Focused on strengthening the hip and thigh musculature.

Conclusion

Meralgia paresthetica is a potential complication of failed spinal anaesthesia for C-section, particularly in the context of prolonged surgery or altered patient positioning. Early recognition and conservative treatment ensure symptom resolution and prevent chronic neuropathy.

References

- **Schnatz P, Wax JR, Steinfeld JD, Ingardia CJ.** (1999). *Meralgia paresthetica: An unusual complication of post-cesarean analgesia.* Journal of Clinical Anesthesia, 11(5), 416–418. [https://doi.org/10.1016/S0952-8180\(99\)00066-5](https://doi.org/10.1016/S0952-8180(99)00066-5)
- **Lee YH, Lee JH, Park YS, et al.** (2011). *Meralgia paresthetica affecting parturient women who underwent cesarean section – A case report.* Korean Journal of Anesthesiology, 60(2), 120–123. <https://pubmed.ncbi.nlm.nih.gov/21286469/>
- **Yanaru T, Katori K, Higa K, et al.** (2012). *Unilateral temporary meralgia paresthetica after cesarean section: report of a case.* Masui, 61(10), 1099–1101. <https://pubmed.ncbi.nlm.nih.gov/23157095/>
- **Peters G, Larner AJ.** (2006). *Meralgia paresthetica following gynecologic and obstetric surgery.* International Journal of Gynecology & Obstetrics, 95(1), 42–43. <https://doi.org/10.1016/j.ijgo.2006.05.025>
- **Paul F, Zipp F.** (2006). *Bilateral meralgia paresthetica after cesarean section with epidural analgesia.* Journal of the Peripheral Nervous System, 11(1), 98–99. <https://doi.org/10.1111/j.1085-9489.2006.00073.x>

!

Dr Olfat Abdelrahman
Specialist Doctor of obstetrics and gynaecology
Dr. Hashem Elhossamy
Consultant of obstetrics and gynaecology
Contact email: hashem.elhossamy@nhs.net