

# Time to First Recognition of Postpartum Abnormal Sensorimotor Deficits Following Neuraxial Anesthesia or Analgesia – *a retrospective cohort study*

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## BACKGROUND:

- Postpartum sensorimotor deficits can impact the recovery period by limiting mobility
- There are a number of time critical causes of lower limb sensorimotor deficits that need to be identified in a timely manner to prevent permanent injury

## AIM:

- We sought to investigate the time taken for postpartum sensorimotor deficits to be first recognized

## METHODS:

- Following ethics approval, retrospective chart review of patients between 2013 and 2022 with suspected postpartum sensorimotor deficits
- Anesthetic, labor and delivery, neuropathy assessment outcomes data were collected

## Primary outcome:

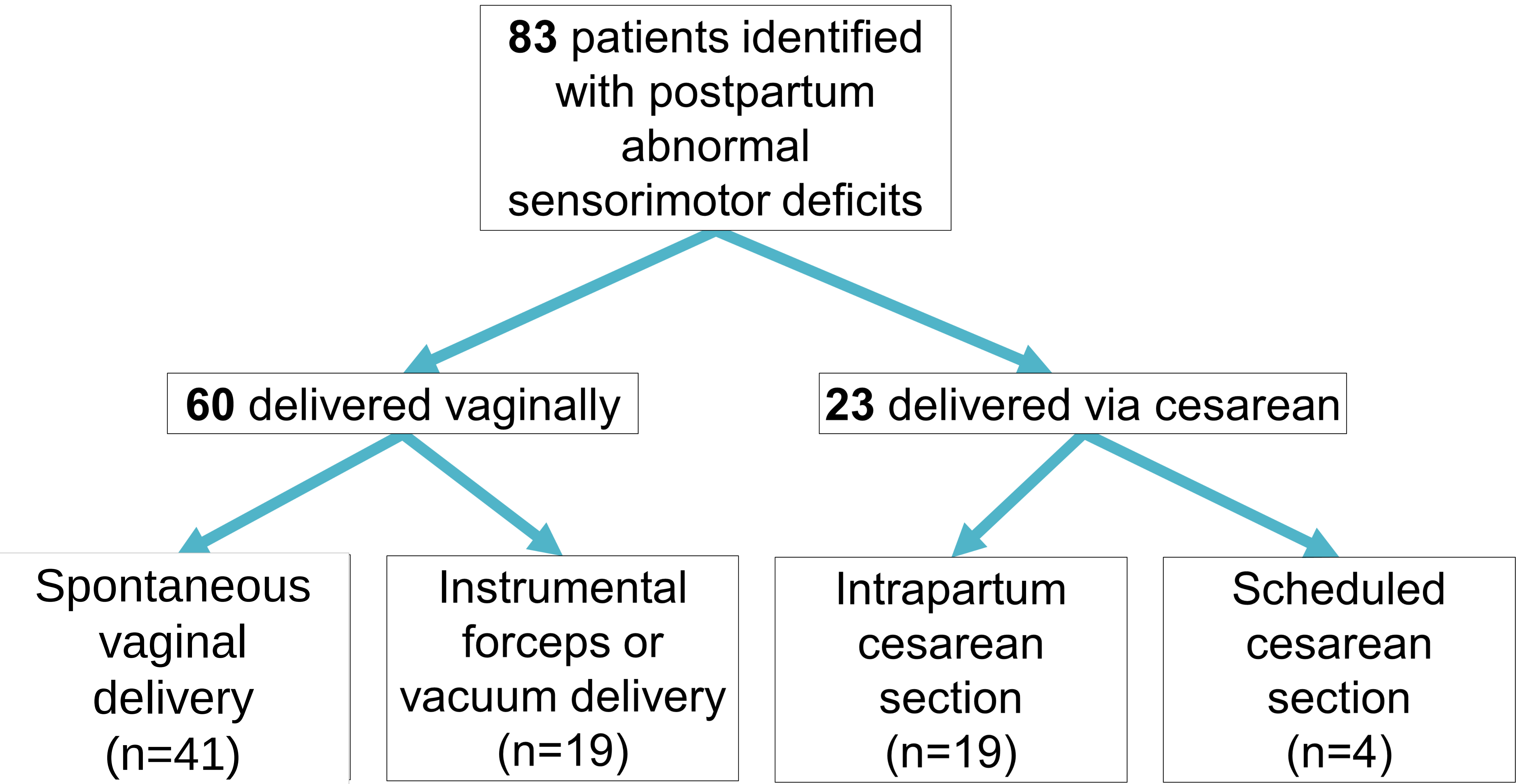
- **Time to recognition of neuropathy**
  - Start time; delivery to first anesthesia consult for the assessment of abnormal sensorimotor deficits

## Secondary outcome:

- Time to first ambulation
  - Delivery to first documented time of ambulation

RESULTS:

- Mean time (SD) to recognition of neuropathy was 30.4 (19.1) hours
- Mean time (SD) to first ambulation was 29.0 (18.7) hours



Mean (SD) time to recognition of neuropathy, hours      Mean (SD) time to first ambulation, hours

|                                 |             |             |
|---------------------------------|-------------|-------------|
| <b>SVD</b><br>(n=41)            | 23.5 (9.8)  | 24.3 (11.2) |
| <b>Instrumental</b><br>(n=19)   | 37.5 (15.1) | 28.6 (20.2) |
| <b>Intrapartum CS</b><br>(n=19) | 40.8 (29.7) | 40.9 (25.9) |
| <b>Scheduled CS</b><br>(n=4)    | 19.0 (13.7) | 21.4 (8.1)  |

- **Distribution** of neuropathies (%):
  - 28 (33.7) lumbosacral plexus
  - 25 (30.1) femoral nerve
  - 12 (14.5) lateral femoral cutaneous nerve

## DISCUSSION:

- Sensorimotor deficits were **not recognized** until 30 hours after delivery
  - Longest in **intrapartum** CS group at 40 hours
- **Femoral** neuropathy and **lumbosacral** plexopathy were the **most common** diagnoses
- **Prolonged** time to **ambulation** may be due to the extent of motor impairment

## FUTURE DIRECTIONS:

- Improve the timely recognition of postpartum sensorimotor deficits
- Assess barriers to early postpartum mobilisation

### References:

1. Wong CA, et al. Obstet Gynecol 2003; 101:279-88.