



# A 4-month audit of postpartum neuropathies in The National Maternity Hospital, Holles Street, Dublin.

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## Aim

We conducted a prospective audit to identify women reporting postpartum neuropathies following spontaneous vaginal delivery, assisted or caesarean delivery who received neuraxial anaesthesia in our hospital.

## Introduction

- Neurological injury intrinsic to the childbirth process still accounts for the vast majority of neurological injury after childbirth.
- The lateral femoral cutaneous nerve is the most commonly injured nerve accounting for obstetric palsies and this injury is known as meralgia paresthetica.
- The incidence of intrinsic obstetric palsies varies from 0.6 – 92 per 10,000. Symptoms of intrinsic obstetric palsies improve or resolve in almost all patients; the median duration of symptoms is 6-8 weeks.
- The incidence of permanent injury after central neuraxial block varies from 0.3 – 1.2 per 100,000.

## Methods

Ethics approval was obtained from the NMH ethics committee.

A prospective audit over a 4-month period identified patients with deficits following neuraxial anaesthesia.

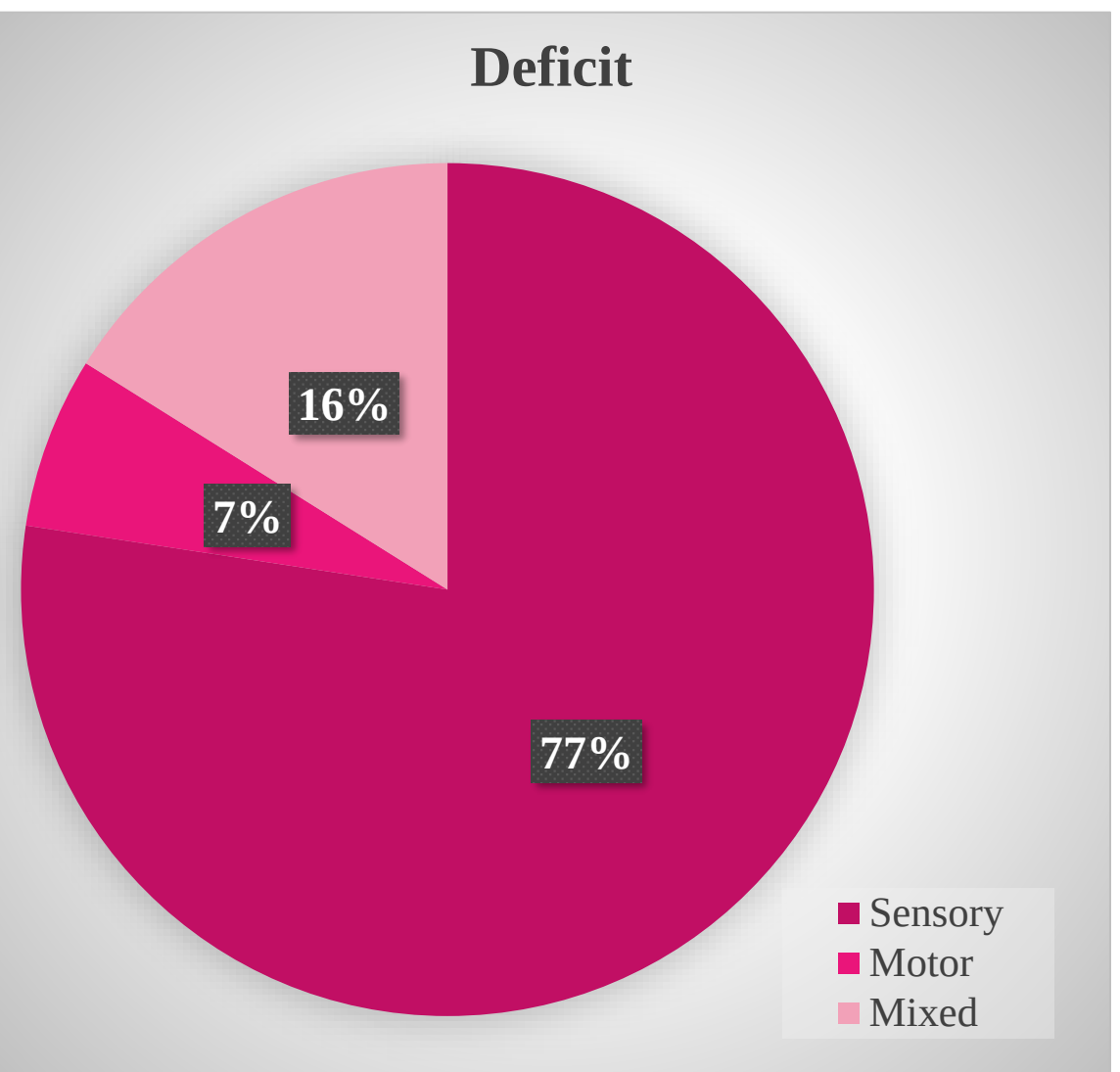
Data collected included:

- Type of regional technique
- Documented difficulty
- SVD vs Assisted Delivery
- BMI
- Duration of second stage
- Sensory v motor deficit
- Distribution of deficit
- Physiotherapy involvement
- Referral source
- Imaging required
- Improvement or resolution

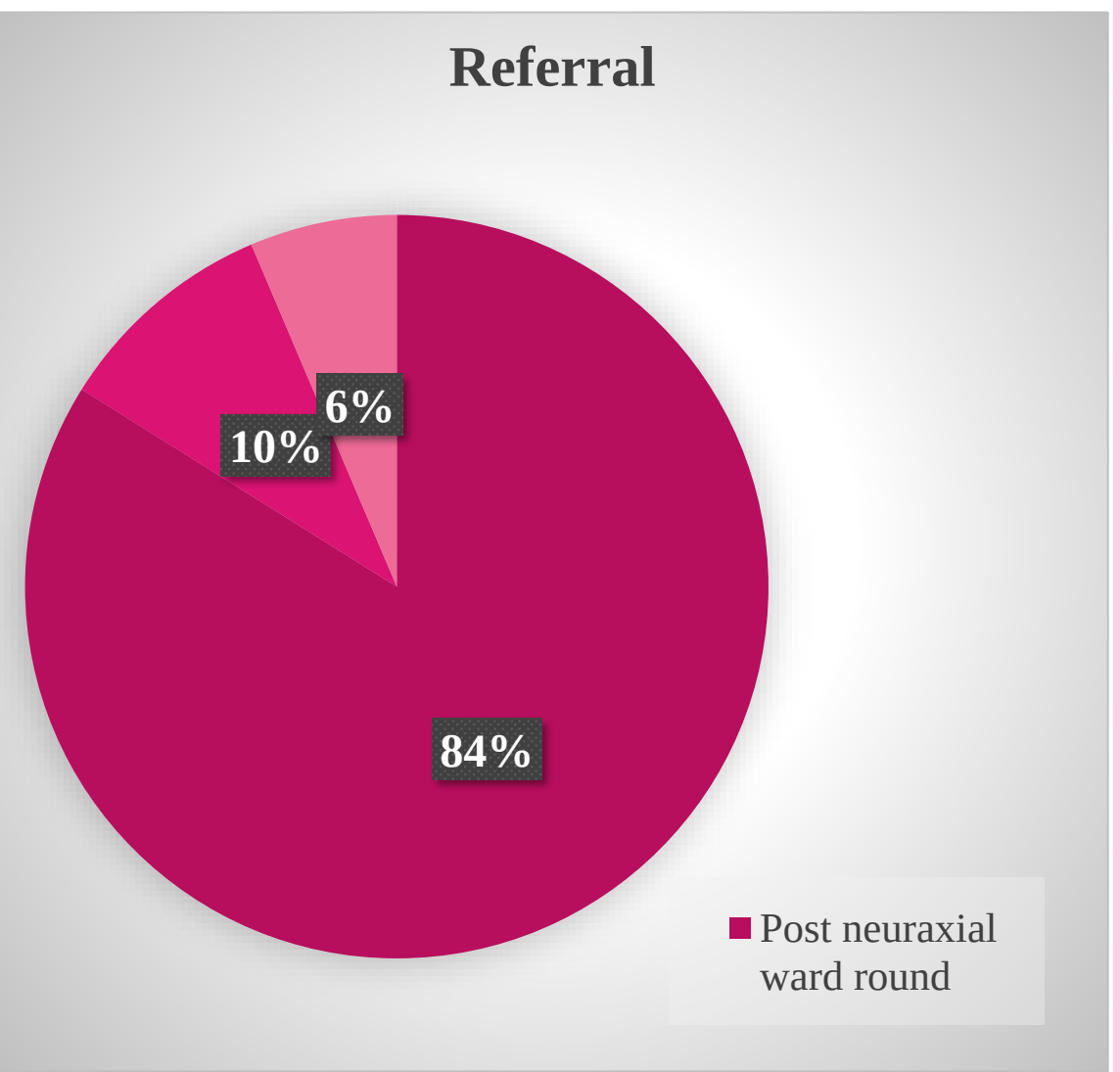
## Results

- 1,955 patients received neuraxial anaesthesia over the four-month period audited.
- 31 (1.58%) reported neuropathies.
- Two (6.5%) patients had an MRI to investigate 1. urinary incontinence, 2. Foot drop. Both were normal.
- Three (9.6%) were referred to physiotherapy.
- There was no obvious association with a higher BMI, a prolonged second stage of labour or assisted delivery.
- Meralgia paresthetica accounted for 54% of patients with a sensory deficit.
- All patients reported resolution on follow up.

### Neuropathies:



### Referral source:



## Discussion

- There is a tendency to implicate anaesthetic interventions due to their temporal association with the mothers' care and neurological changes.
- Neuropathy can be a result of mechanical trauma producing stretch, compression, or transection of the nerve tissue (neuropraxia). Alternatively, compromise of the blood supply or the presence of a neurotoxin may be the cause.
- The associations with damage are primiparity, a prolonged second stage, and/or forceps delivery
- Neuraxial pathology is often associated with pain and symptoms worsen over time.
- Postpartum neuropathies can be diagnosed by an obstetrician, generalist or anaesthetist.
- Specific care pathways should have an MDT approach with physiotherapy, obstetrics and anaesthesia input.

## References

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