



## CLINICAL GUIDELINE

# Postnatal Neuropathy Assessment

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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<b>Lead Author:</b>	Ravi Agaram
<b>Approval Group:</b>	Maternity Clinical Governance Group

### Important Note:

The Intranet version of this document is the only version that is maintained. Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

## POSTNATAL NEUROPATHY

DATE OF FIRST REVIEW \_\_\_\_\_

SEEN BY \_\_\_\_\_

ID LABEL

REFRRAL      Obs/ Midwifery      Physio      Patient      Postnatal follow up

ANAESTHETIC DETAILS      Date of anaesthetic intervention \_\_\_\_\_

Spinal      CSE      Epidural      No regional

Needle type and size \_\_\_\_\_      Difficult insertion/ Multiple attempts      Level of insertion \_\_\_\_\_

Paraesthesia/ site of paraesthesia

Bleeding from needle/ catheter      ADP/ PDPH

### DELIVERY DETAILS

SVD      Forceps del      Em CS      El CS      Lithotomy position

Prolonged 2<sup>nd</sup> stage

### RISK FACTORS

Anticoagulants      Antiplatelet agents      Thrombocytopenia

Spina bifida      Midline back swelling/ lesion      Kyphosis/ Scoliosis

Previous spinal surgery      Diabetes      High BMI      CNS disorders

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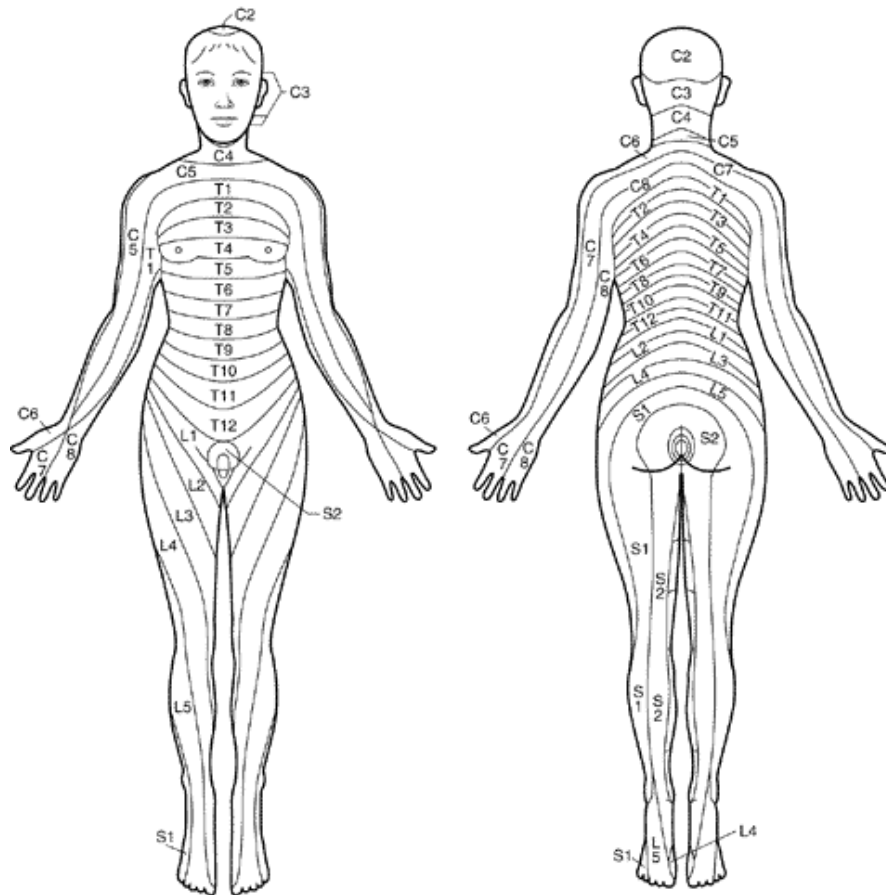
### NEUROLOGICAL EXAM

Symptoms and details of presentation

Higher functions

Cranial nerves

**SENSORY**



**SIGNS AT THE REGIONAL SITE** Pain/ tenderness Bruising

**MOTOR**

Muscle groups	Innervation	Power	
		R	L
Hip flexion	(L1 2 3/ Femoral n)		
Hip adduction	(L 2 3 4/ Obturator n)		
Knee extension	(L2 3 4/ Femoral n)		
Knee flexion	(L4 5 S1 2 3/ Sciatic n)		
Ankle dorsiflexion	(L4 5 S1/ Deep Peroneal n)		
Ankle plantar flexion	(L5 S1/ Tibial n)		

**REFLEXES**

**BLADDER/ BOWEL SYMPTOMS/ SIGNS/ OTHER NEUROLOGY**



**PROVISIONAL DIAGNOSIS**

**IMAGING/ NERVE CONDUCTION STUDIES AND RESULTS**

**OUTCOME/ FOLLOW UP**

**REVIEWS (PLEASE DATE AND SIGN ALL REVIEWS)**

## COMMON OBSTETRIC NEUROPATHIES

Neuropathy	Type of deficit	Symptoms	Innervation	Significance/ Imaging
Meralgia Paraesthetica (Lateral cutaneous nerve of thigh)	Sensory	Numbness/ paraesthesia anterolateral thigh	L2 3 4	Injury to lat cutaneous nerve of thigh under the inguinal ligament
Femoral neuropathy (Femoral n)	Mixed sensory/ motor	Knee extension Anterior thigh and knee	L2 3 4	Intra pelvic/ inguinal compression
Obturator neuropathy	Mixed sensory/ motor	Hip adduction Medial thigh	L 2 3 4	Intra pelvic/ inguinal compression
Tibial n/ lumbosacral trunk	Mixed motor/ sensory	Foot drop 	L 4 5, S 1 2 3	Conus injection Lithotomy stirrups Injury at pelvic brim MRI indicated for confirmation
Prolapsed intervertebral disc	Sensory/ Motor	Neuropathic 'root' pain	L5 S1	MRI Indicated if bilateral, central cord symptoms
Neuraxial haematoma	Sensory/ Motor,	Bilateral, extending Bladder and bowel control affected 	Variable	MRI indicated early for neurosurgical referral

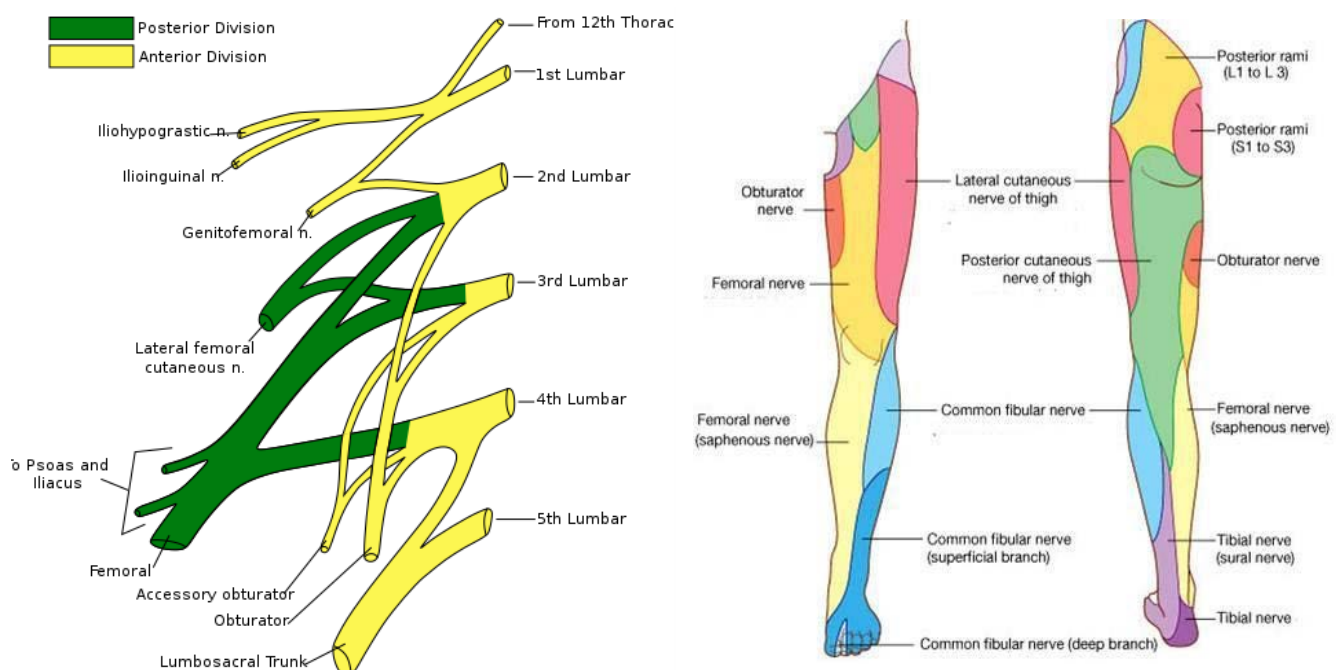
## TERMINOLOGY

Allodynia: Pain perceived with a non painful stimulus.

Hyperaesthesia: Exaggerated perception and response to a painful response.

Dysaesthesia: Unpleasant, abnormal surface sensations, both provoked and spontaneous.

Neuropathic pain: Pain resulting from nerve lesions (central and peripheral)



## MANAGEMENT OF POSTNATAL NEUROPATHY

### INDICATIONS FOR IMAGING

- Foot drop

Imaging is indicated if conus injury is suspected or aetiology of foot drop is uncertain. A syrinx may be demonstrated, confirming the diagnosis of conus injury. Treatment is supportive.

- Bilateral, extending, mixed sensorimotor signs with loss of bowel and bladder control
- Sciatica/ root pains worsening, with signs of central cord compression.

MRI is indicated to rule out neuraxial haematoma/ infection. If any of these lesions are seen on imaging, urgent neurosurgical referral is indicated.

### SUPPORTIVE TREATMENT

- COMMUNICATION WITH THE PATIENT

It is important not to reassure the mother regarding the prognosis of the neuropathy unless the diagnosis is conclusive.

Nerve conduction studies are useful in determination of the level of nerve injury (central/ peripheral, in pelvis/ periphery)

Physio input is very useful, to start rehabilitation early and for accessing prosthetics (Ankle support for foot drop).

Follow up if indicated.

### References/ sources

1. Postpartum neurological symptoms following regional blockade: a prospective study with case controls. Dar A Q, Robinson A P C, Lyons G. IJOA. 2002. 11; 85-90.
2. Neurological complications associated with pregnancy. A Holdcroft F B Gibberd R L Hargrove D F Hawkins C I Dellaportas. BJA: 75, Issue (5), 1 November 1995, Pages 522–526