

Peripheral Neuropathy Associated With Lithotomy Position: A Case Report

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INTRODUCTION:

Iatrogenic nerve injury following gynaecologic surgeries in lithotomy position is a significant cause of post-operative neuropathy. The frequency of neuropathy from lower extremity is of 1:3,608 where the most commonly injured nerve of the lower limb is the lumbosacral root (16%) however infrequent in sciatic and femoral nerves. Neuropathies can be mild and resolve spontaneously but may also be severe and affecting life quality.

CASE REPORT:

A 32-year-old woman presented with numbness and weakness of the left foot at day one post-laparoscopic gynaecology surgery in which she was placed in lithotomy position throughout two hours of procedure. Physical examination shows weakness in motor and sensory components of L4 nerve root division and below. Nerve conduction study was done after six months and is evident of left sciatic nerve neuropathy. At her recent visit, she has complete motor recovery however sensory component remains impaired.

DISCUSSION:

Prolonged duration of surgical procedure in lithotomy position predisposes a patient to peripheral neuropathy. Risk of peripheral neuropathy is increased up to 3.2% for 120 minutes in lithotomy position. Mechanism involves direct nerve damage from surgery or stretch and compression of the nerves in limb positioning beyond comfortable range. In an improper lithotomy position, both sciatic and peroneal nerves are susceptible to stretch injuries associated with hyper flexion. This could be prevented by positioning patients with proper padding of pressure areas and placing patients in lithotomy with hip flexion $\leq 120^\circ$.

CONCLUSION:

Peripheral neuropathy associated with surgical access positions may be temporary or permanent. Poor recovery affects patients profoundly to the quality of life. Avoiding nerve injuries require understanding of the anatomy and pathophysiology involved. Hence, attention should be given in using all probable preventive measures essential for patient's safety.

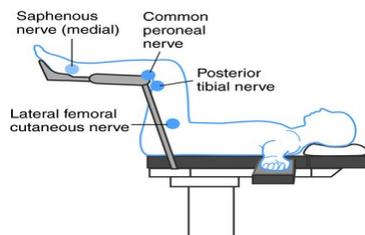


Figure 1

Types of peripheral nerve injuries expected in lithotomy position

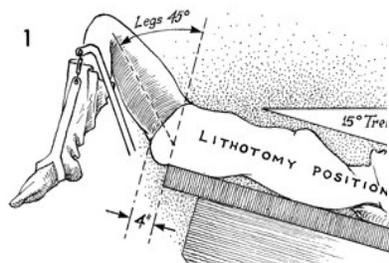


Figure 2

Schematic diagram of proper lithotomy position

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2. Katrina W. et al, Peripheral nerve injuries and positioning
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