

Lateral Cutaneous Nerve Injury of Common Peroneal Nerve: a Case report

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INTRODUCTION

Sensory symptoms in the lateral aspect of the calf can be occurred by several causes. The most common cause is L5 radiculopathy, but rarely injury of lateral cutaneous nerve (LCN) of common peroneal nerve has been reported. LCN is a cutaneous branch which leaves the common peroneal nerve at the popliteal fossa proximal to the fibular head. We present a case with injury of LCN of common peroneal nerve.

CASE REPORT

A 42-year-old woman complained of sensory change on the proximal lateral side of the right leg after sitting for a long time, which was worsened when walking. She had no history of trauma, diabetes mellitus or other systemic diseases. Manual muscle testing of the right lower extremity was normal. Sensation was decreased on the proximal lateral leg (Fig. 1). Tinel sign around the lateral side of knee was negative. Nerve conduction studies of the right lower extremity was normal except unobtainable LCN response (Table 1). LCN conduction study was performed with orthodromic technique: recording site, 4 cm proximal to fibular neck; stimulating site, 8 cm distal to fibular neck (proximal lateral leg). Needle electromyographic examinations of the right lower extremity were no abnormal spontaneous activities and normal motor unit action potentials in muscles tested. Ultrasonographic examination demonstrated swelling of the right LCN 4cm above the fibular neck (Fig. 2). After symptomatic conservative treatment such as gabapentin and capsaicin cream, her symptom was slightly improved.

CONCLUSION

LCN of common peroneal nerve is difficult to evaluate because of its small size and anatomical variation. Although antidromic technique to evaluate LCN was reported. orthodromic technique was performed. Our case is the first case of LCN injury of common peroneal nerve with the swelling of the LCN on ultrasonography. The LCN injury is rare but should be considered when there are sensory symptoms in the lateral aspect of the calf. The patient's symptoms are the most important for diagnosis, but ultrasonography may help diagnosis.



Fig1. Ultrasonographic evaluation showed swelling of the right LSCN observed 4cm above the fibular neck