

Common Peroneal Nerve Compression Due to An Intramuscular Ganglion Cyst

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INTRODUCTION

Causes of Common Peroneal Palsy

- Common Peroneal neuropathy at the head of the fibula
- Lumbar plexopathies
- L5 radiculopathy
- Partial sciatic neuropathy
- Posttraumatic intraneural hemorrhage
- Nerve-sheath tumor
- Intraneural ganglion

Symptoms

- Can be sudden or gradual
- Lateral leg discomfort
- Decreased sensation of the first dorsal web space
- Weakness of the affected muscles
- Inability to dorsiflex the affected foot

PRESENTATION

- A 60-year-old woman presented with pain over the lateral aspect of the right lower extremity, loss of sensation in the first & second web spaces, and an inability to dorsiflex the right foot

DIAGNOSIS

- MRI revealed a mass overlying the right fibular head with Common Peroneal Nerve compression (Figure 1)



Figure 1

OBJECTIVE

- Compression of the Common Peroneal Nerve by a ganglion cyst is infrequently seen in the clinical setting. We report a case of an intramuscular ganglion cyst that caused compression of the Common Peroneal Nerve resulting in Common Peroneal Palsy. This may be of value for awareness and differential diagnosis of progressive Peroneal Palsy.

SURGICAL PROCEDURE

- An incision was made over the head of the fibula
- Peroneal nerve was identified and preserved
- Distal branches were dissected and decompressed (Figure 2)
- Mass was noted within the anterior tibialis muscle (Figure 2)
- Peroneal nerve was compressed at the level of the fibular head
- The cyst was dissected from the anterior tibialis muscle in a proximal to distal direction preserving the underlying nerves. (Figure 3)
- The proximal end was firmly attached to the fibular head. Nerve integrity was preserved.

OUTCOMES

- Pathology revealed a benign intramuscular ganglion cyst
- One week postoperatively the patient was able to dorsiflex the affected ankle.
- Five weeks postoperatively the patient had full motor recovery and normal sensibility.



Figure 2

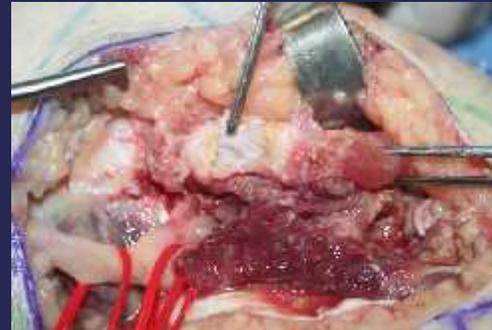


Figure 3

CONCLUSION

- We report a case of an intramuscular ganglion cyst that caused the compression of the Common Peroneal Nerve.
- Early identification and early surgical intervention can lead to the best possible recovery.