

신경근육재활 및 전기진단

게시일시 및 장소 : 10 월 18 일(금) 13:15-18:00 Room G(3F)

질의응답 일시 및 장소 : 10 월 18 일(금) 15:45-16:30 Room G(3F)

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Intra-supinator ganglion cyst compressing the posterior interosseous nerve: Case Series

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INTRODUCTION

The posterior interosseous nerve is most commonly compressed at the proximal margin of the supinator, the arcade of Frohse by various courses. Because posterior interosseous nerve is divided from the radial nerve just proximal to the arcade of Frohse, injury of the posterior interosseous nerve can cause pain along the radial nerve course, weakness of radial nerve innervating muscles without sensory symptoms. We retrospectively review 4 patients with the posterior interosseous nerve compressed by intra-supinator ganglion cyst.

CASE SERIES

The diagnosis of intra-supinator ganglion was confirmed by magnetic resonance imaging (MRI). The average age of patients is 63 (37-82) years old and 3 patients is woman. All patients showed motor weakness of upper extremity (distal part) and three of them are mostly suffering from finger weakness. Symptom starts on 16 (7-120) days ago. Electrophysiologic study was performed in the all patients. Abnormal findings (no response or low amplitude) of compound muscle action potential (CMAP) of the radial nerve and neurogenic pattern of radial nerve innervated muscles are found in the all patients. Sensory nerve action potential (SMAP) of superficial radial nerve is normal. Ultrasonographic examination revealed ganglion cyst within supinator muscle and compression of PIN around arcade of Frohse. MRI findings revealed the ganglion cyst compressing the radial nerve and swelling of posterior interosseous nerve, distal to the compression. Surgical excision of ganglion cyst and US guided aspiration with steroid injection to the ganglion cyst was performed in the 2 patients, each. Only the patients who treated with the US-guided aspiration with steroid injection was follow-up after treatment. Their symptom improved and reduced ganglion cyst was showed in the ultrasonographic examination.

CONCLUSION

In patient with posterior interosseous neuropathy, the intra-supinator ganglion cyst is one of the important disease to be considered and ultrasonographic examination plays definitive role in identifying the cause.

Acknowledgment : 없음

Table 1. Symptom, electrophysiological diagnosis, ultrasonography finding and treatment in each cases

| | Symptoms | EDx | USG | Treatment |
|---------------|---------------------------------|---|-------------------------------|---|
| CASE 1 | Right wrist drop | Severe right posterior interosseous neuropathy distal to the supinator muscle innervation | Intra-supinator ganglion cyst | Surgical excision |
| CASE 2 | Left finger extension weakness | Incomplete left radial neuropathy with severe conduction block distal to supinator muscle innervation | Intra-supinator ganglion cyst | Surgical excision |
| CASE 3 | Left finger extension weakness | Incomplete left posterior interosseous neuropathy around the proximal forearm level with active denervation process | Intra-supinator ganglion cyst | US guided aspiration with steroid injection |
| CASE 4 | Right finger extension weakness | Incomplete right posterior interosseous neuropathy around the elbow | Intra-supinator ganglion cyst | US guided aspiration with steroid injection |

EDx: electrophysiological diagnosis, USG: ultrasonography