

## **Lateral pectoral nerve neuropathy after endoscopic thoracic sympathectomy**

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### **Introduction**

Lateral pectoral nerve neuropathy can diagnosed by the clinical presentation, electromyography (EMG) and nerve conduction study (NCS). In the few reported cases of such injuries, the cause was trauma to this region or postoperative complications.

### **Presentation of case**

A 61-year-old male who underwent bilateral endoscopic thoracic sympathectomy due to hyperhidrosis. The left 6th midaxillary line was inserted with 5mm troca, and the left upper lobe was detached by using endopeanut, endograsper, ligasure. He underwent incidental laceration of left 4th Intercostal artery and underwent clipping with endoclips. His chief complaints were left anterolateral chest wall tingling pain, tenderness, paresthesia and weakness over 8 weeks. He came our clinic at 8 weeks after surgery , EMG and NCS were performed immediately.

### **Discussion**

If the lateral pectoral nerve is injured or removed, it can Result in total denervation of the pectoralis major muscle with severe atrophy and fibrosis of this muscle. Figure 1 shows significant atrophy of the left pectoralis major muscle. Figure 2 showed difference of latency bilaterally upon testing of the lateral pectoral nerve (Right – 2.1 msec, Left – 3.5 msec) and the amplitude of the response on the left was substantially lower than the right (Right – 5.2mv; Left – 3.6 mv). NCS of the median, ulnar, radial, and EMG of the biceps was normal and unlike usual Results, right pectoralis major muscle was normal.

### **Conclusions**

If a patient complains of local atrophy of the pectoral muscle or unilateral tingling sense or paresthesia, the patient should be suspected of lateral pectoral nerve neuropathy. EMG and NCS can confirm localized abnormal findings in specific muscle and an isolated lesion of the lateral pectoral nerve, so it will be helpful in the diagnosis of lateral pectoral nerve neuropathy.



Figure 1. A 61-year-old man with an atrophy of the left pectoralis major muscle Result in difference of areolar level.

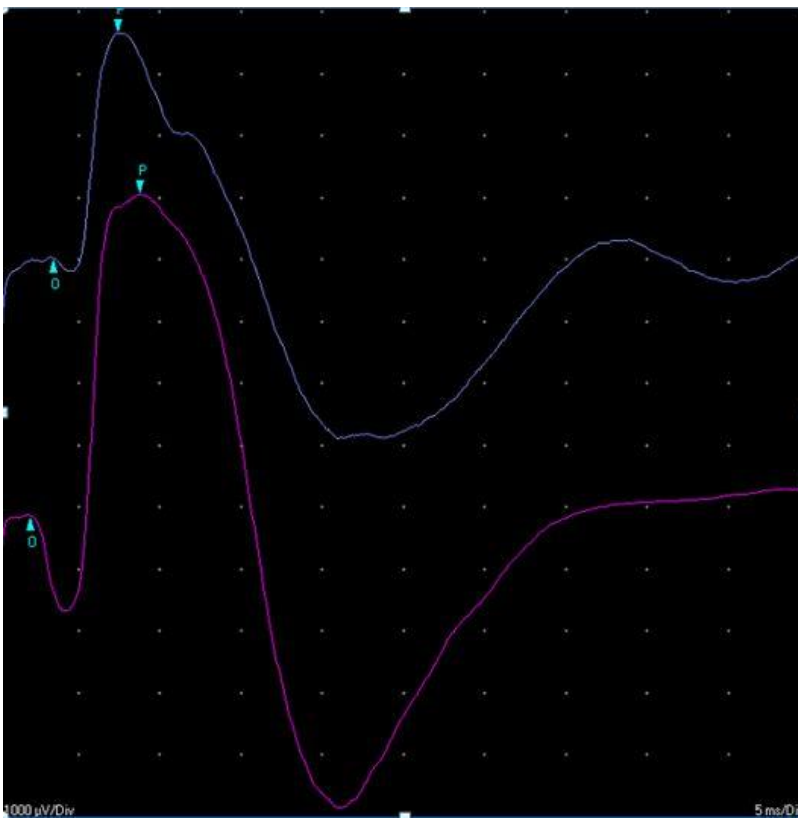


Figure 2. Motor conduction study of bilateral lateral pectoral nerve. Right-purple line, Left-blue line.