

**Title:**

Musculocutaneous Neuralgia Following Arthroscopic Tenotomy of the Long Head of the Biceps:  
A Case Report

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**Abstract:****Background:**

Musculocutaneous nerve injury is a rare complication of long head of the biceps (LHB) tenotomy. We present a case to highlight the potential for traction neuropathy from distal tendon retraction and a surgical solution.

**Case Presentation:**

A 56-year-old male developed burning, radiating arm pain following LHB tenotomy. Electromyography (EMG) and clinical evaluation indicated musculocutaneous nerve irritation. During open tenodesis, visible nerve tension was observed and alleviated by reattaching the LHB, leading to near-complete symptom resolution.

**Discussion:**

This case supports the mechanism of nerve traction injury after tenotomy and aligns with other reports of distal nerve entrapment, including the lateral antebrachial cutaneous nerve. While mechanical complications of tenotomy are well documented, neuropathic pain remains underrecognized. Early diagnosis with tools like EMG and Douleur Neuropathique 4 (DN4) questionnaire can guide treatment.

**Conclusion:**

Persistent neuropathic pain after LHB tenotomy may indicate musculocutaneous nerve traction. Biceps tenotomy can lead to symptomatic nerve traction in select patients, likely related to distal tendon retraction and subsequent stretching of the musculocutaneous nerve. In patients presenting with persistent neuropathic symptoms after tenotomy, surgical tenodesis with re-tensioning of the LHB can effectively relieve symptoms and should be considered in appropriate cases.