



Video Abstract

Exploration of the right peroneal nerve after a gunshot wound

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ABSTRACT

Background: Gunshot wounds (GSWs) often result in neuropraxia or a mixed injury pattern rather than direct nerve transection. There is still debate between early and delayed intervention for the optimal treatment of intact nerves following GSWs. Early intervention may prevent the formation of dense scar tissue, and delayed intervention allows for the zone of injury to be fully demarcated for optimal treatment planning. Here, we present the case of a 29-year-old male who underwent exploration of the right common peroneal nerve after a GSW.

Case Description: A 29-year-old male presented for evaluation of a GSW to the right lower extremity at the level of the fibular head he sustained 2 months prior. Following his injury, he was immediately evaluated in the emergency department and offered supportive care. He reported paresthesias in the right lower extremity and a right-sided foot drop. Computed tomography demonstrated a bullet fragment in the distal right lower extremity, and ultrasound revealed a partial thickness injury in the right peroneal nerve. Exploration of the right common peroneal nerve and bullet fragment was recommended. The bullet fragment was removed from the distal right lower extremity in one piece. Following this, the right common peroneal nerve was decompressed proximally to distally, with scar tissue encountered distally. Postoperatively, the patient did well, ambulating shortly after surgery, and at 3 weeks postoperative, he was ambulating without difficulty.

Conclusion: Clinical judgment and risk-benefit analysis of each patient must be made individually to determine the most optimal treatment method following GSWs.

Keywords: Gunshot wound, Peroneal nerve decompression, Trauma

[Video 1]-Available on:

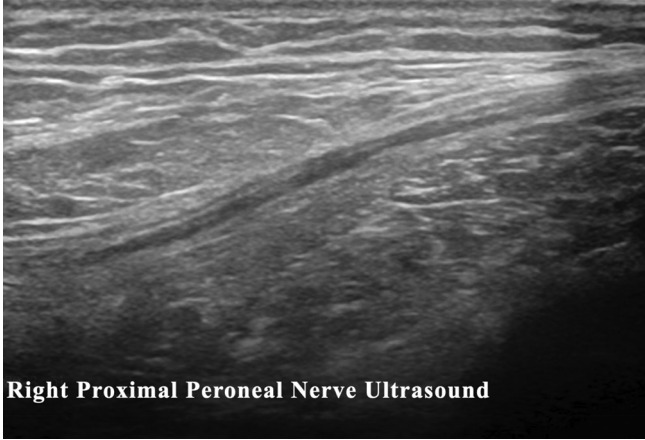
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Annotations^[1-4]

- 1) 0:05 – Case presentation
- 2) 0:44 – Neuroimaging findings
- 3) 1:35 – Surgical discussion
- 4) 3:01 – Surgical video
- 5) 5:00 – Background
- 6) 5:42 – Review of clinical outcome
- 7) 5:50 – References

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Video 1: Exploration of the right peroneal nerve after a gunshot wound.

Ethical approval

Institutional Review Board approval is not required.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Nil.

Conflicts of interest

There are no conflicts of interest.

Use of artificial intelligence (AI)-assisted technology for manuscript preparation

The authors confirm that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

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