

*Case report*

# Surgical Treatment of an Open Elbow Dislocation with Vascular Injury: A Case Report

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## SUMMARY

Open elbow dislocations with vascular injury are rare injuries and they most commonly occur after a fall from a high or in sports accidents. Close anatomic proximity of the joint to the neurovascular structures put them at risk of concomitant injury. The aim of this paper is to present the method of treatment of this severe injury.

Herein we present a case of a female patient, 43 years old. She had suffered an open elbow dislocation with vascular injury as a result of a fall from the height of 1.5 meters. Seven hours after sustaining the injury and short preoperative preparation, reposition of the elbow, reconstruction of the vascular injury, adequate surgical treatment of the wound and external fixation of the elbow with the Mitković type external fixator were performed under general anesthesia. Four weeks after elbow stabilization with the external fixation, the external fixator was removed. The neurovascular status and final functional result of the treatment after six months were good.

Urgent reposition, artery and vein reconstruction, and external fixation are essential in achieving good results in patients with open cubital dislocation accompanied with vascular injury. The Mitković type external fixator provides fast and stable fixation of the elbow after reposition and good conditions for wound care.

*Key words:* open elbow dislocation, vascular injury, external fixation

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