

# FATAL THORACO-AXILLARY GUNSHOT TRAUMA WITH COMPLETE TRANSECTION OF THE AXILLARY ARTERY AND VEIN: A CASE REPORT

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## Introduction

Gunshot wounds involving the thoracic and axillary regions are associated with extremely high morbidity and mortality due to the density of vital vascular structures. Combined transection of the axillary artery and vein is exceptionally rare but almost universally fatal, as it results in massive hemorrhage and irreversible hypovolemic shock.

## Aim

The aim of this report is to present the case of a 65-year-old male with a gunshot wound resulting in complete disruption of the left axillary artery and vein, highlighting the clinical presentation, diagnostic findings, and the therapeutic limitations encountered.

## Materials and Methods

We retrospectively analyzed the clinical course of a 65-year-old man presenting to the Emergency Department following a penetrating gunshot injury. The entry wound was located in the left anterior thoracic wall, superior to the nipple, while the exit wound was in the left axillary region.

Evaluation followed the ATLS protocol, including primary survey, chest tube insertion, and immediate resuscitation attempts.

Data were obtained from clinical examination and procedural interventions.

## Results

On arrival, the patient was in profound hypovolemic shock with a blood pressure of 20/20 mmHg, absent palpable pulses, and severely compromised consciousness. He essentially presented moribund, with minimal signs of life. Chest drainage immediately evacuated a large volume of blood, confirming a massive left hemothorax. Further exploration revealed complete transection of both the axillary artery and vein, causing catastrophic hemorrhage. Despite immediate application of advanced resuscitation measures—airway management, high-flow oxygen, aggressive fluid resuscitation, and massive transfusion—the patient remained hemodynamically unstable. The extent and location of the vascular injury rendered surgical repair unfeasible within a salvageable timeframe, and the patient succumbed shortly after admission.



## Conclusions

This case underscores the devastating nature of thoraco-axillary vascular trauma, particularly when both the axillary artery and vein are transected. Even with prompt emergency department management and adherence to advanced trauma protocols, survival is highly unlikely when patients present in a pre-arrest state with irreversible hypovolemia. Rapid prehospital recognition, bleeding control, and expedited transfer remain critical, though in such injuries the prognosis remains extremely poor.