

PARTIAL AXILLARY ARTERY RUPTURE IN A PEDIATRIC BLUNT TRAUMA CASE

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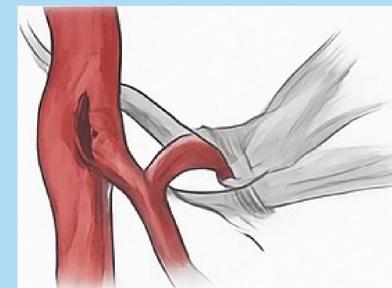
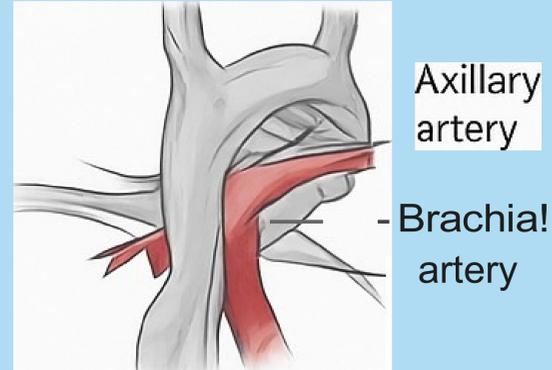
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• INTRODUCTION / OBJECTIVE:

Vascular injuries in children are rare, with the axillary artery being an uncommon site of trauma. Partial rupture of the axillary artery after blunt trauma, particularly with an open wound exposing anatomical structures, is extremely uncommon. Clinical recognition can be challenging, especially in the absence of ischemic signs. Prompt diagnosis and urgent surgical repair are critical to preserve limb perfusion and function. To present a rare case of partial axillary artery rupture in a 10-year-old girl following blunt trauma to the right upper extremity, who presented to the Emergency Department with an open wound and intact distal perfusion, where the diagnosis was established immediately due to visible anatomical injury.

• MATERIALS & METHODS:

A 10-year-old female patient presented to the Emergency Department after sustaining blunt trauma to her right upper extremity, resulting in an open wound over the axillary region. Clinical examination revealed extensive hematoma and ongoing bleeding, while distal pulses remained palpable. The anatomical structures of the artery were directly visible, allowing immediate recognition of a partial rupture of the axillary artery without further imaging. The patient underwent emergent surgical exploration, and the arterial defect was repaired via end-to-end anastomosis.



• RESULTS:

The postoperative course was uneventful. The patient demonstrated full preservation of distal perfusion and upper limb function, with no vascular or neurological complications. Follow-up revealed no evidence of thrombosis or pseudoaneurysm formation.

• CONCLUSIONS:

Partial rupture of the axillary artery in children is an exceedingly rare event. Absence of ischemia may delay diagnosis; however, in cases of open trauma with visible anatomical structures, diagnosis can be made immediately. Urgent surgical repair remains the treatment of choice, ensuring excellent restoration of perfusion and limb function. Awareness of this rare injury pattern is essential for timely recognition and management in pediatric trauma settings.