

VIDEOS IN EMERGENCY MEDICINE

Trauma

A man with a pulsatile scalp lesion

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KEYWORDS

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1 | PATIENT PRESENTATION

A 29-year-old male presents to the emergency department complaining of pulsatile bleeding from the left temporal scalp (Figure 1, Video 1). Two weeks ago, he was assaulted with a glass bottle to the left side of his head, sustaining a laceration that was repaired with topical skin adhesive. The patient reports progressive swelling at the site of the laceration over the past 2–3 days, followed by intermittent pulsatile bleeding occurring today immediately after removing his hat and inadvertently causing wound dehiscence.

2 | DIAGNOSIS: TRAUMATIC PSEUDOANEURYSM OF THE TEMPORAL ARTERY

A computed tomography (CT) angiography was obtained, confirming pseudoaneurysm of the left temporal artery. Vascular surgery was consulted and urgent surgical ligation and resection was performed. The patient was discharged without issue the following day.

Traumatic pseudoaneurysm of the temporal artery is a rare, yet dangerous lesion typically occurring after blunt or penetrating trauma to the temporal region.^{1,2,3,4} Pseudoaneurysms occur secondary to disruptions of the arterial wall, resulting in a hematoma enclosed either within the tunica adventitia or surrounding soft tissues,^{2,3} and are at risk of rupture and hemorrhage.^{1,2} Due to its anatomic location close



FIGURE 1 Still image of pulsatile lesion of the left temporal scalp.

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VIDEO 1 Pulsatile lesion of the left temporal scalp.

to the skin, the temporal artery is relatively vulnerable to potential traumatic injury.^{1,2,3,4}

Patients often present 2–6 weeks following the initial injury and may describe an expanding, painless, and pulsatile mass in the temporal region.^{1,3} Other associated symptoms may include hemorrhage, dizziness, headache, visual disturbances, facial nerve deficits, or ear pain.^{1,3} Clinical suspicion is confirmed via ultrasound or CT angiography.^{2,4} Surgical ligation and resection is the mainstay of treatment,^{1,4} though thrombin injection^{1,2,3,4} and coil embolization^{3,4} are considered alternative treatment modalities.

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