

Pulsatile Supraciliary Mass After Head Trauma

Massa Supraciliar Pulsátil Após Traumatismo Craniano

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DOI: <https://doi.org/10.29315/gm.1157>

KEYWORDS: Aneurysm, False; Craniocerebral Trauma; Temporal Arteries

PALAVRAS-CHAVE: Artérias Temporais; Falso Aneurisma; Traumatismos Craniocerebrais

An 80-year-old man with hypertension, atrial fibrillation not receiving anticoagulation, a prior cardioembolic right middle cerebral artery stroke with residual left-leg weakness, and mild vascular cognitive impairment was found on the street after an unwitnessed collapse with head trauma and transient incontinence. In the emergency department, he was confused and amnesic for the event and reported frontal headache and dizziness. Vital signs were stable. Examination revealed an actively bleeding right supraciliary laceration with an overlying hematoma and a new focal neurologic deficit, right homonymous hemianopia. He was admitted for a cardioembolic ischemic stroke involving a left temporo-occipital cortico-subcortical infarct in the posterior cerebral artery territory.

During the second week of hospitalization, a progressively enlarging, nontender, pulsatile mass developed above the right eyebrow (Fig. 1). Color Doppler ultrasonography showed a saccular lesion consistent with a pseudoaneurysm of the superficial temporal artery. He underwent open surgical excision and ligation of the superficial temporal artery pseudoaneurysm through a right supraciliary incision with thrombus removal, without complications (Fig. 2).

Traumatic pseudoaneurysm of the superficial temporal artery is rare, representing less than 1% of reported aneurysms, and typically presents two to six weeks after blunt cranial trauma as a painless, pulsatile swelling.^{1,2} Duplex ultrasonography is usually diagnostic,

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Recebido/Received: 2026-01-24; Aceite/Accepted: 2026-02-29; Publicado online/Published online: 2026-08-04.

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FIGURE 1. Traumatic pseudoaneurysm of the superficial temporal artery (right supraciliary region): Preoperative photograph showing a supraciliary mass (arrow).



FIGURE 2. Traumatic pseudoaneurysm of the superficial temporal artery (right supraciliary region): Postoperative photograph after excision, with complete resolution (arrow).

and computed tomography (CT) angiography can delineate the vascular anatomy for surgical planning when needed.^{2,3} The superficial temporal artery is especially vulnerable because it runs superficially and may be compressed against bony landmarks.^{2,4} Ligation and excision are definitive and usually curative.^{1,4,5}

CONTRIBUTORSHIP STATEMENT/ DECLARAÇÃO DE CONTRIBUIÇÃO

ARA - Manuscript writing, literature search, and final approval.

TCC - Review and literature search.

HFP - Critical review and final approval.

All authors approved the final version to be published.

ARA - Redação do manuscrito, pesquisa bibliográfica e aprovação final.

TCC - Revisão e pesquisa bibliográfica.

HFP - Revisão crítica e aprovação final.

Todos os autores aprovaram a versão final a ser publicada.

ETHICAL DISCLOSURES

CONFLICTS OF INTEREST: The authors have no conflicts of interest to declare.

FINANCIAL SUPPORT: This work has not received any contribution, grant or scholarship.

CONFIDENTIALITY OF DATA: The authors declare that they have followed the protocols of their work center on the publication of patient data.

PATIENT CONSENT: Consent for publication was obtained.

PROVENANCE AND PEER REVIEW: Not commissioned; externally peer-reviewed.

RESPONSABILIDADES ÉTICAS

CONFLITOS DE INTERESSE: Os autores declaram a inexistência de conflitos de interesse na realização do presente trabalho.

FONTES DE FINANCIAMENTO: Não existiram fontes externas de financiamento para a realização deste artigo.

CONFIDENCIALIDADE DOS DADOS: Os autores declaram ter seguido os protocolos da sua instituição acerca da publicação dos dados de doentes.

CONSENTIMENTO: Consentimento do doente para publicação obtido.

PROVENIÊNCIA E REVISÃO POR PARES: Não comissionado; revisão externa por pares.

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