

## Apixaban Tedavisi Altında, Süperfişiyal Temporal Arterin Travmatik Psödoanevrizması

### Traumatic Pseudoaneurysm of Superficial Temporal Artery in an Under Apixaban Therapy

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#### Anahtar Sözcükler:

Apixaban

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#### Key Words:

Apixaban

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#### ÖZ

80 yaşında bir kadın hasta, bir ay önce künt kafa travmasının ardından sağ temporal bölgede pulsatil ve ağrısız bir kitle görülmesi üzerine yatırıldı. Birkaç aydır derin venöz tromboembolizm nedeniyle oral apixaban tedavisi (2x5 mg) kullanan hastada, Doppler ultrason ve Bilgisayarlı Tomografi Anijografi incelemesinde, sağ süperfişiyal temporal arterin psödoanevrizması olduğu görüldü. Hastaya lokal anestezi altında cerrahi eksplorasyon yapıldı. Sağ süperfişiyal temporal arterin rüptüre olduğu gözlemlendi ve bu damar bağlanarak tedavi edildi.

#### ABSTRACT

An 80-year-old female was admitted to the hospital, presenting a pulsatile and painless mass on the right temporal site occurred one month ago following a blunt head trauma. She was under oral apixaban therapy (2x5 mg) due to deep venous thromboembolism for several months. Doppler ultrasound examination and computed tomography angiography revealed pseudoaneurysm of the right superficial temporal artery. Patient underwent surgical exploration under local anesthesia. Total rupture of the STA was observed and ligated.

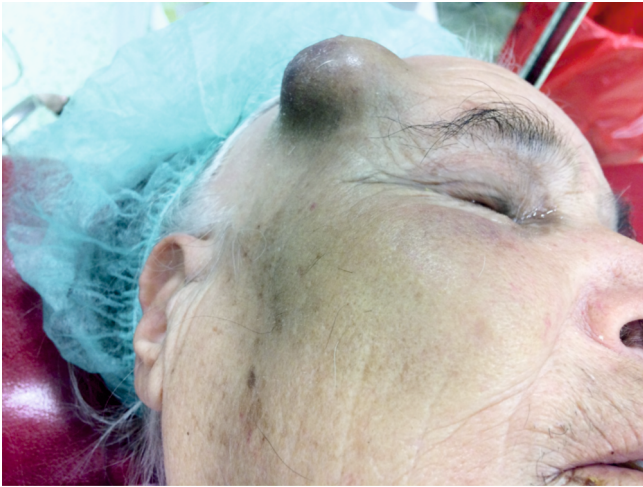
#### Introduction

A pseudoaneurysm is a dilation of an artery that includes a defect in one or more layers of arterial wall (1). Pseudoaneurysm of the superficial temporal artery is a rare clinical entity (2).

The use of new oral anticoagulants is increasing day by day due to increasing indications of these drugs. We present a case of superficial temporal artery pseudoaneurysm under oral apixaban therapy due to deep venous thrombosis. To our knowledge, this is the first case of superficial temporal artery pseudoaneurysm developing under new oral anticoagulant therapy.

#### Case Report

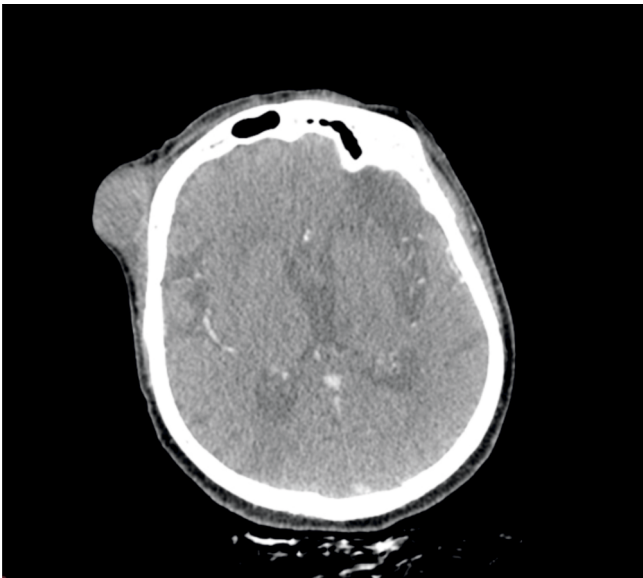
An 80-year-old female was admitted to the hospital, presenting a pulsatile and painless mass on the right temporal site occurred one month ago following a blunt head trauma (Figure 1). She was under oral apixaban therapy (2x5 mg) due to deep venous thromboembolism for several months. Doppler ultrasound examination and computed tomography angiography (CTA) revealed pseudoaneurysm of the right superficial temporal artery (STA) (Figure 2) and patient underwent surgical exploration under local anesthesia. Total rupture of the STA was observed and ligated (Figure 3).



**Figure 1.** Painless and pulsatile mass on right temporal site.

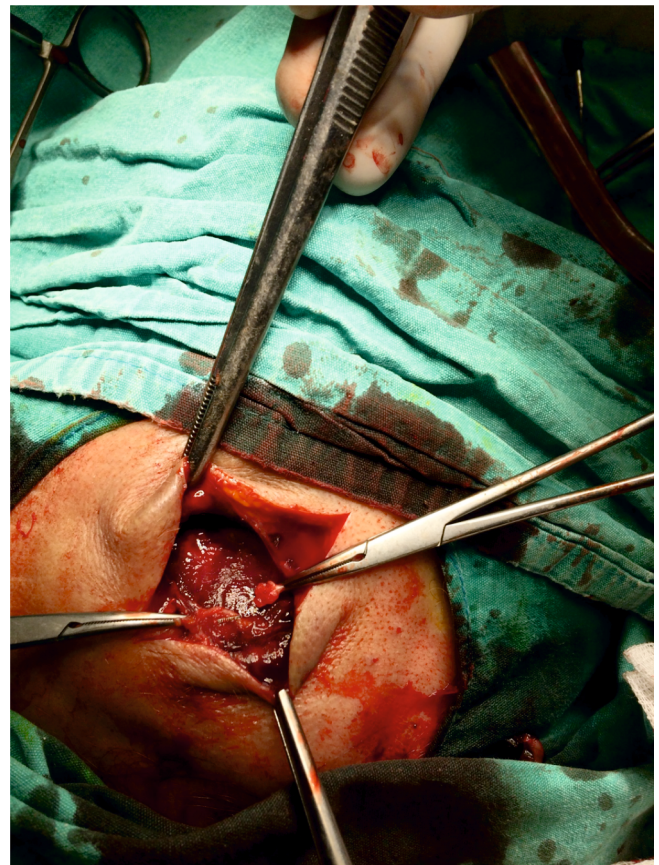
### Discussion

STA is one of the most vulnerable arteries involved following a craniofacial trauma, however; traumatic pseudoaneurysm of the STA is an unusual condition (3). A pulsatile mass on the temporal site commonly indicates the presence of a pseudoaneurysm and headache or ear discomfort may accompany to the



**Figure 2.** Computed tomography image demonstrates pseudoaneurysm sac on the temporal site.

condition (4). CTA and/or Doppler ultrasound examination are noninvasive and effective diagnostic tools. Differential diagnoses for STA pseudoaneurysm include vascular tumor, arteriovenous fistula, meningeal artery aneurysm with bony erosion, subcutaneous lipoma, abscess, and localized hematoma. Surgical ligation and division, thrombin injection, embolisation and endovascular interventions are options for the treatment (4). New oral anticoagulants are increasingly used by octogenarian patients with atrial fibrillation or deep venous thromboembolism. Penetrating or even blunt trauma to the head may result in pseudoaneurysm formation in elderly patients who are prone to falls and this diagnosis should be kept in mind to avoid some serious complications such as hemorrhage.



**Figure 3.** Intraoperative view of the superficial temporal artery and pseudoaneurysm sac (Proximal and distal sides of the artery were clamped).

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