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Figure 1. Healed laceration overlying a tender 1×1-cm mass on the left palm.

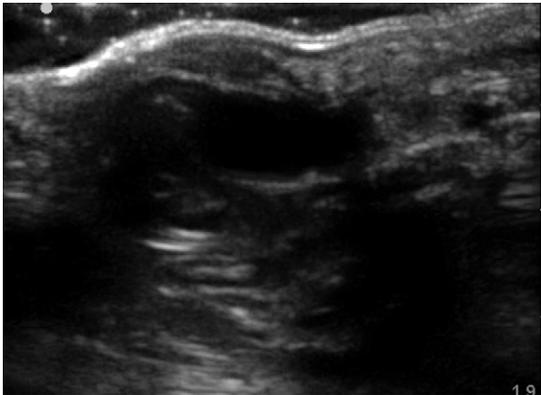


Figure 2. Sonographic image of the patient's palmar mass (13-6 MHz linear-array transducer).

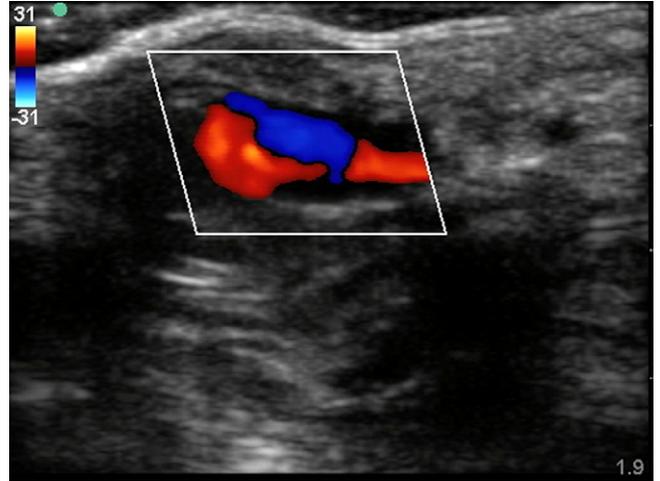


Figure 3. Sonographic image of the patient's pulsatile palmar mass with color Doppler flow (13-6 MHz linear-array transducer).

[Ann Emerg Med. 2013;62:569.]

An 8-year-old girl presented to the emergency department for removal of sutures from her left palm. She accidentally cut her hand with a steak knife 11 days earlier and was treated at an outside hospital, where 1 suture was placed. After removal of the suture, physical examination revealed a 1-cm tender bluish pulsatile mass (Figure 1). Her fingers exhibited normal sensation and capillary refill. Bedside ultrasonography was used to evaluate the wound (Figures 2 and 3).

*For the diagnosis and teaching points, see page 577.
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(continued from p. 569)

DIAGNOSIS:

Superficial palmar arch pseudoaneurysm. A pseudoaneurysm of the superficial palmar arch is a rare occurrence most commonly reported after penetrating trauma to the artery.¹⁻⁴ Disruption of the arterial wall results in bleeding and formation of an adjacent hematoma, which is later surrounded by fibrous tissue, creating a continuous pocket with the artery. In contrast, a true aneurysm is a dilation involving all 3 arterial layers.⁴

Clinical presentation can include pain, swelling, and a pulsatile mass in the palm near the site of previous injury.^{1,2} Hemorrhage is a rare presentation.³ Complications include infection, arterial occlusion, nerve compression, and, rarely, osseous erosion.²⁻⁴ Ultrasonography is typically used as the initial diagnostic imaging modality, and angiography is used for evaluation of collateral blood flow.^{1,2}

Surgical excision and vascular reconstruction are most commonly performed to ensure distal perfusion and avoid complications.¹⁻⁴ Uncomplicated small stable pseudoaneurysms can be managed conservatively with compression bandages and close follow-up.⁵ Our patient was successfully treated conservatively.

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