

Giant Subclavian Artery Pseudoaneurysm After Pleural Drainage Puncture

Nasser M. Malyar, MD; Franz-Eduard Brock, MD

A 59-year-old man with thoracic sarcoma was referred for evaluation of swelling, pain, and functional impairment of his right arm. Six weeks prior, a right thoracic catheter was placed for drainage of pleural effusion, where now a pulsatile tumor (Figure 1) was noted. Duplex ultrasound of the right arm revealed impaired arterial perfusion and dilated veins with slow flow but no thrombosis. The pulsatile mass was demasked as a giant pseudoaneurysm (6×8 cm) surrounding the subclavian artery by ultrasound with a carousel-like flow within the pseudoaneurysm (Figure 2; see also corresponding Movies I and II in the online-only Data Supplement) and confirmed by selective angiography. The pseudoaneurysm was successfully treated by percutaneous implantation of 2 self-expandable covered stents grafts (Figure 3A through 3C), resulting in immediate release of symptoms and regaining of normal function of his right arm. Puncture of the region close to the subclavian vessels can result in pseudoaneurysm of the subclavian vessels, possibly leading to fatal bleeding if not diagnosed accurately and treated adequately.



Figure 1. Pulsatile tumor in the right midsubclavicular region (circle).

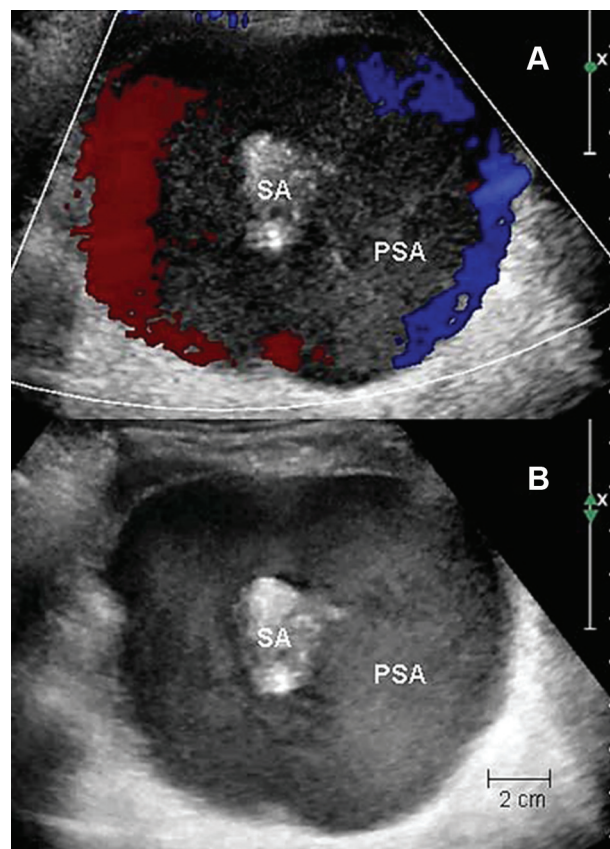


Figure 2. A and B, Color duplex and 2-dimensional sonographic images of the subclavicular, pulsatile tumor. PSA indicates pseudoaneurysm.

Disclosures

None.

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The online-only Data Supplement is available with this article at <http://circ.ahajournals.org/lookup/suppl/doi:10.1161/CIRCULATIONAHA.111.047712/-/DC1>.

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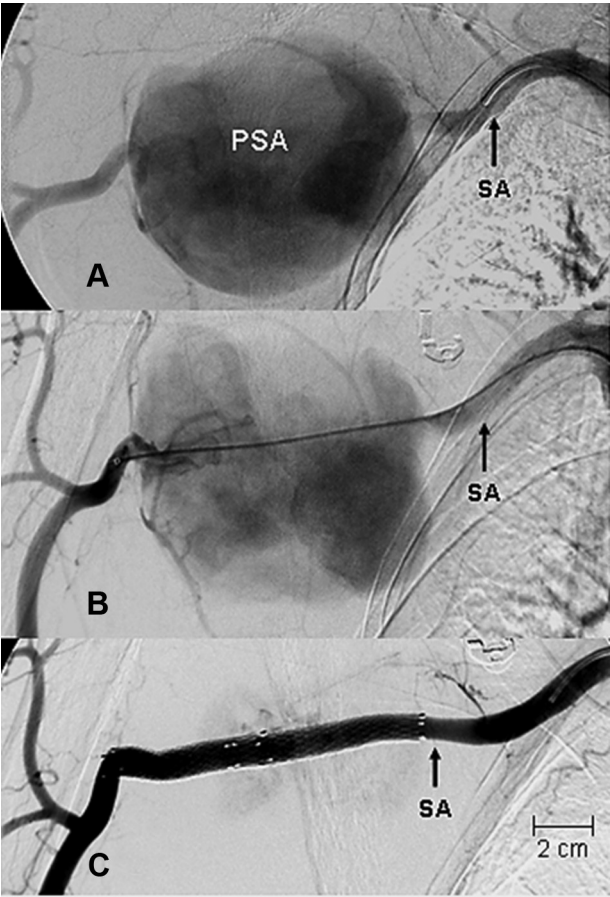


Figure 3. Selective angiography of the right subclavian artery (SA) confirming the pseudoaneurysm (PSA) before (**A** and **B**) and after (**C**) stenting.

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