

Vascular Injury by Vascular Closure Device

Vivek Guleria, DM; G. Keshavamurthy, DM; Prashant Bharadwaj, DM

Army Hospital Research and Referral, Delhi, India.

VASCULAR DISEASE MANAGEMENT 2021;18(7):E113-E114.

Key words: bleeding, complications, vascular closure device

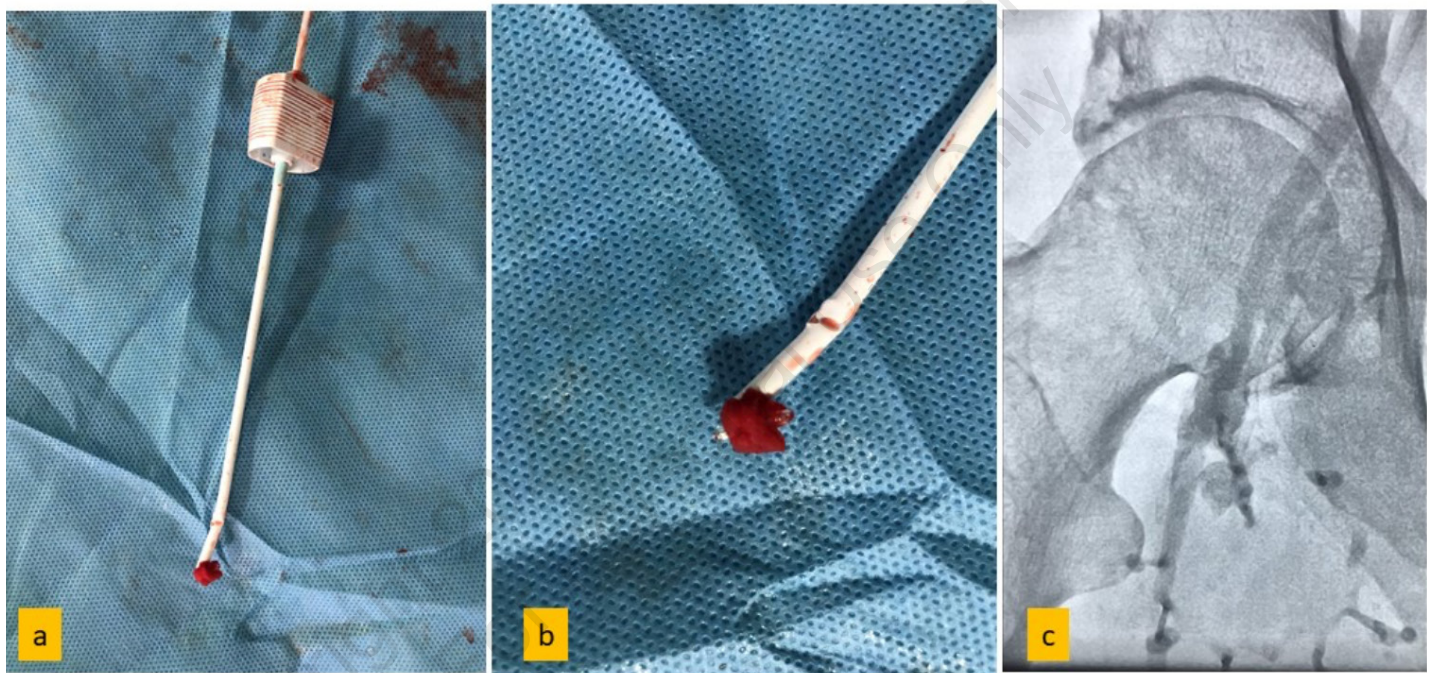


Figure 1. Angio-Seal with extruded sponge and anchor (a, b). Angiogram showing blood spurting from the rent in common femoral artery (c).

After successfully stenting the right coronary artery with two drug eluting stents in a 57-year-old male, it was decided to close the femoral access site with 6 Fr Angio-Seal (Terumo) device. After good pulsatile flow exiting the arteriotomy locator port was obtained, the locator was removed and the compaction tube was advanced through the insertion sheath until a click was heard. The compaction tube was pulled back, but the second click was not heard despite multiple attempts. We realized there had been mechanical failure of the device, as the whole device came out along with the sponge and anchor (**Figures 1a and 1b**). This was followed by a sudden spurt of blood. Manual compression

didn't stop the bleeding. Left femoral access was taken and an angiogram was done using Judkins right (6 Fr) catheter placed in right external iliac artery. Angiogram revealed a large rent in the common femoral artery with spurting of blood (**Figure 1c, Video 1**) as the manual compression was released momentarily.

A 7 x 37 mm covered stent was unsuccessfully deployed in the right common femoral artery (**Figure 2a**), and the patient was taken up for open vascular closure. Preop revealed a 5 mm rent in the common femoral artery, which was successfully closed using a 7 mm Dacron interposition graft achieving complete hemostasis (**Figures 2b and 2c**).

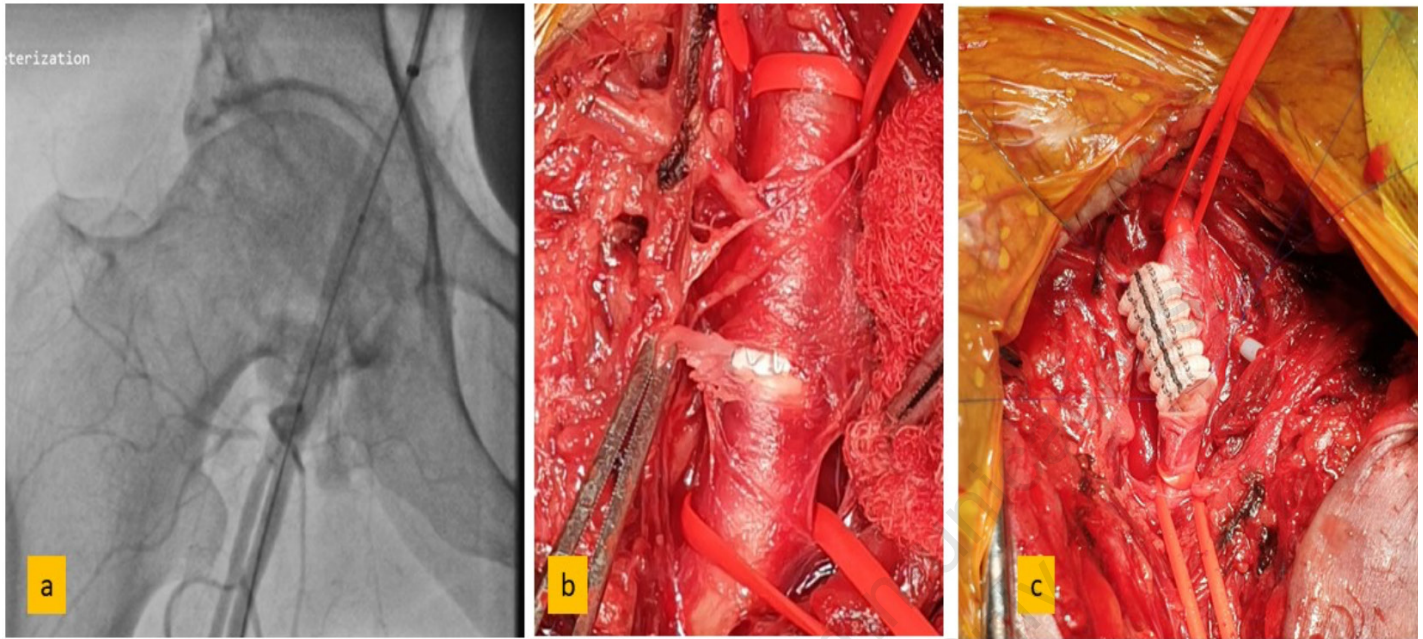


Figure 2. Persistent leak despite use of a covered stent in the CFA (a). Exposed CFA showing anterior wall injury and underlying covered stent (b). CFA being repaired with 7 mm Dacron interposition graft.

Disclosure: The authors have completed and returned the ICMJE Form for Disclosure of Potential Conflicts of Interest. The authors report no financial relationships or conflicts of interest regarding the content herein.

The authors report patient consent for the images used herein.

Address for correspondence: Vivek Guleria, DM, Army Hospital Research and Referral, Delhi, India. Email: vivekguleria@gmail.com