

**Research Article**

## **RIGHT FOREARM PSEUDOANEURYSM EXCISION-POST AV FISTULA**

**\*Suraj Wasudeo Nagre**

*Department of C.V.T.S. Grant Medical College, Mumbai*

*\*Author for Correspondence*

### **ABSTRACT**

Post av fistula radial artery pseudo aneurysm is rare entity with great significance because of risk of complications like thrombosis and ruptures and should be operated early whenever diagnosed. Our Case report has 22 year female patient with chronic renal failure on regular biweekly dialysis. She developed right radial artery pseudo aneurysm six months after av fistula. A pseudo aneurysm, also known as a false aneurysm, is a hematoma that forms as a result of a leaking hole in artery. Hematoma was contained by the surrounding tissues. Also it must continue to communicate with the artery to be considered a pseudo aneurysm.

**Keywords:** *Forearm Pseudoaneurysm Excision*

### **INTRODUCTION**

Post av fistula radial artery pseudoaneurysm is rare entity with great significance because of risk of complications and it should be operated early whenever diagnosed (Pero and Herrick, 2009). Majority of time it can be easily excised without any arterial sacrifice. But in some of rare cases where radial artery was adherent to pseudoaneurysm, the excision of part of radial artery along with pseudoaneurysm followed by ligation of proximal and distal cut ends may be required. Before such excision of part of radial artery, ulnar artery patency must be confirmed clinically as well as by doppler for limb survival.

### **CASES**

Our 22 year female patient has history of right wrist av fistula one year back for chronic renal failure . Since then she was on regular biweekly dialysis via right forearm veins. The patient consented to publication of this report. The patient noticed pulsatile swelling over right forearm two month back which has increased rapidly in last one week. Doppler study s/o partially thrombosed pseudoaneurysm arising from radial artery above the functioning av fistula. Decision was taken to excise the pseudoaneurysm without damaging the radial artery because of risk of rupture and thrombosis.

Two incision taken over forearm, one proximal and another distal to pseudoaneurysm along radial artery and radial artery looped proximally and distally. Both the incision extended and connected to each other. Pseudoaneurysm separated [figure 1] slowly by finger and cautery from surrounding vital structures followed by ligation of feeding vessels [figure 2]. The opening of pseudoaneurysm into the radial artery identified, ligated, cut and overrun with prolene 5-0 suture and the pseudoaneurysm removed [figure 3] with preserving both av fistula as well as radial artery.

### **DISCUSSION**

Informed consent had previously been obtained from the patient. Preoperative antibiotics consisting of cefazolin were given. The patient was brought to the operating room and placed supine on the or table. General anaesthesia was induced. A time-out was performed. The patient and procedure were verified to be correct. The patient's right arm was prepped and draped in the standard, sterile fashion. An incision was then made longitudinally along an 8 cm pseudo aneurysm of the cephalic vein providing outflow for the av fistula. Dissection was carried around the aneurysmal cephalic vein, mobilizing it from the surrounding tissue. Proximal and distal vascular clamps were placed on the aneurysm. A longitudinal incision was then made on the anterior aneurysm. Approximately 2 cm on both the medial and lateral aspects of the aneurysm were excised, and then the vessel was repaired with 6-0 praline in a running fashion. Both proximal and distal clamps were released. There were two areas of oozing on the vessel

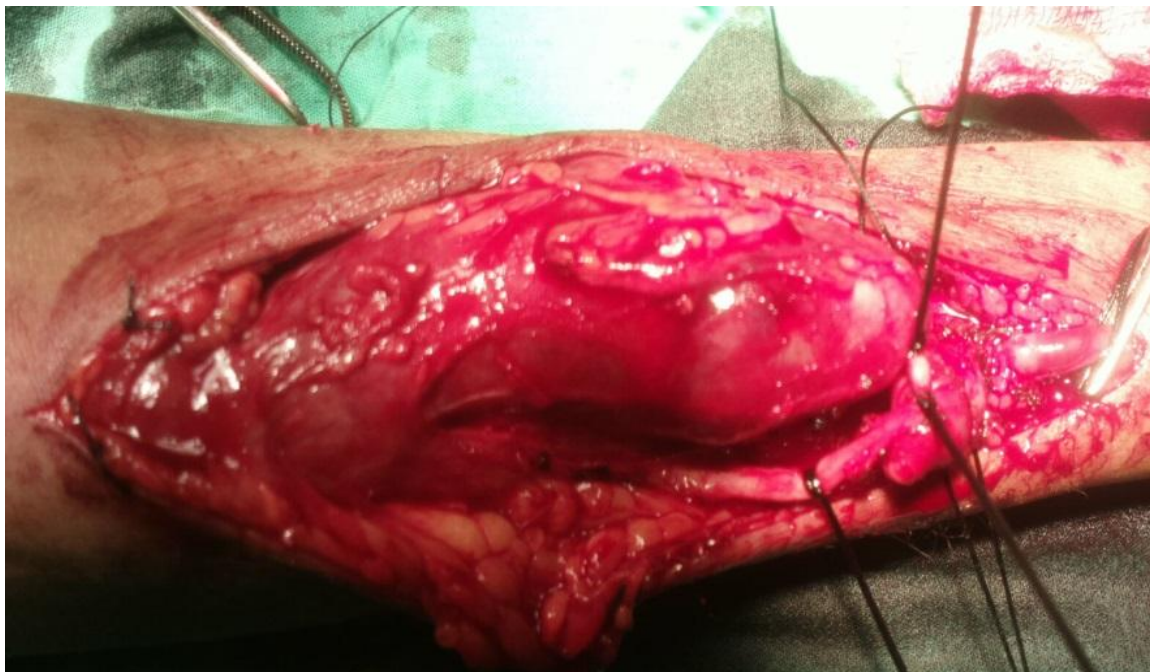
### **Research Article**

which were repaired with 6-0 praline in a figure-of-eight fashion. Electrocautery was used to achieve hemostasis in the subcutaneous tissue.

Another incision was made a few centimetres down the cephalic vein where it had branched off from the av fistula. A 2-cm incision was made on the skin. The branch was found with ease and ligated with two 3-0 silk ties. The aneurysmal wound was irrigated and dried. 3-0 dextron was used to tack the dermis to the underlying fascia. The skin was then reapproximated with 4-0 nylon in a horizontal mattress fashion over the aneurysmal incision and the side branch incision. The patient's arm was then cleaned and dried. 4 x 4's and tegaderms were applied to the wound.



**Figure 1: Pseudo aneurysm separated**



**Figure 2: Feeding Vessel Ligation and Cutting**





**Figure 3: Excised Partially Thrombosed Pseudo aneurysm**

### **Conclusion**

By proper anatomical dissection pseudo aneurysm can be excised without damaging the radial artery and surrounding vital structure. The pseudo aneurysm excision was simple and safe even in inexperienced hands by proper anatomical knowledge. Timely management was important to prevent complications like thrombosis and rupture.

### **REFERENCES**

**Thomas Pero and John Herrick (2009).** Pseudoaneurysm of the Radial Artery Diagnosed by Bedside Ultrasound. *West Journal of Emergency Medicine* 10(2) 89–91.