

Abstract**Pseudoaneurysms in Arteriovenous Fistulae: The Hospital Kuala Lumpur Experience**

Lola H, Naresh G, Hanif H, Zainal Ariffin A

Department of Surgery, Hospital Kuala Lumpur, Kuala Lumpur, Malaysia

Introduction:

One of the most dreaded complications arising from Arteriovenous fistula (AVF) which are used for long term haemodialysis access are pseudoaneurysms. The resultant rupture of untreated pseudoaneurysm will require emergency surgery and often this results in ligation of the fistula. Ligation will lead to loss of the access in a patient whom more often than not has very limited access options, The etiology and the sites of the pseudoaneurysms are varied. Hospital Kuala Lumpur is a tertiary referral centre for vascular diseases in Malaysia. This study aims at reviewing the various cases treated in our centre.

Materials and Methods:

All patients referred to the vascular unit from the 1st of June 2011 until the 31st of May 2012 (1 year) with pseudoaneurysms arising from AVFs were included in the study. The study includes both fistulae created pre dialysis and fistula in use. The records of the patients were obtained and the data recorded and analyzed.

Results:

There were a total of 37 patients with 22 males and 15 females. The duration of the fistulae were from half a month until 5 years. The types of fistula included radiocephalic (19%), brachicephalic (57%), brachio basilic (19%) and prosthetic grafts (5%). The procedure performed were emergency repair (24%), emergency ligation (38%), elective repair (30%) and elective ligation (8%). There were significantly higher repair in the arterial pseudoaneurysm group ($p < 0.05$). The outcome of the surgery resulted in 24% of the fistula being salvaged and used for dialysis.

Conclusion:

Despite being able to repair almost half the number of pseudoaneurysms, only a quarter of the fistulae were successfully used subsequently. This translates into most patients requiring either new fistulae or other forms of renal replacement therapy. As such, prevention of pseudoaneurysm is of paramount importance.

Keywords:

Arteriovenous fistula (AVF), pseudoaneurysm, repair, ligation