Indian Journal of Medical Case Reports ISSN: 2319–3832(Online) An Open Access, Online International Journal Available at http://www.cibtech.org/jcr.htm 2015 Vol. 4 (2) April-June, pp. 101-103/Ayyappan et al.

Case Report

# A RARE CASE OF BASILIC VEIN ANEURYSM

\*Ayyappan M.K, Jagan B., Radhakrishnan R. and Narayanan C.D.

Department of Vascular Surgery & General Surgery, Sri Ramachandra University, Chennai, India-600116 \*Author for Correspondence

#### ABSTRACT

Venous Aneurysm is a very rare entity. Very few have been reported in the vascular literature. They most commonly present at the popliteal vein, or internal jugular vein. Many are asymptomatic, and a few present with pain, swelling or compression on the nearby structures. There is also a risk of thrombus formation and embolisation of the thrombus. We present a rare case of Basilic vein aneurysm, for which surgery was performed.

Keywords: Basilic Vein, Venous Aneurysm

# **INTRODUCTION**

Venous Aneurysms are very rare. Popliteal Vein is the commonest site and women above 45 years are commonly affected (Sessa *et al.*, 2000). This is the first case of Aneurysm of the Basilic Vein described in the literature. Internal Jugular vein is the other common vein to develop an aneurysm. Here we have presented a rare case of Basilic vein aneurysm.

#### CASES

**A 21** year old d male patient presented with swelling and pain in the right arm for one year duration (Figure 1). There was no history of trauma or fever. He had no other complaints. Pain was continuous and dull aching in nature. There was no hand swelling, numbness or paresthesia.



Figure 1: Swelling RT Arm (Basilic Vein)

Indian Journal of Medical Case Reports ISSN: 2319–3832(Online) An Open Access, Online International Journal Available at http://www.cibtech.org/jcr.htm 2015 Vol. 4 (2) April-June, pp. 101-103/Ayyappan et al. **Case Report** 



Figure 2: Basilic vein Aneurysm on Duplex Ultrasound

On Examination: There was a swelling in the Right arm, medial aspect. It was 3x4cm, soft in consistency, not warm or tender. It was compressible and was not pulsatile. Distal pulses were normal and there was no distal neurological deficit. Duplex Ultrasound was done which confirmed a Basilic Vein Aneurysm (Figure 2).

**Procedure:** Under Supraclavicular block, Incision was made over the dilated vein, Proximal and distal controls were taken and the vein was excised after separating from the medial cutaneous nerve of arm. Hemostasis was well secured and closure done (Figure 3). Post operative period was uneventful and a review in 3 months was absolutely normal.



Figure 3: Excision of the Basilic Vein Aneurysm

# DISCUSSION

Venous Aneurysms are very rare. Popliteal Vein is the commonest site and women above 45 years are commonly affected (Sessa *et al.*, 2000). This is the first case of Aneurysm of the Basilic Vein described in the literature. Internal Jugular vein is the other common vein to develop an aneurysm. However Portal vein Aneurysm (Purandath *et al.*, 2011) and Posterior Tibial vein Aneurysm (Roberto *et al.*, 2010) have also been published. They have been associated with Neurofibromatosis type 1 (Mirko *et al.*, 2011) and also with Masson's Intravascular hemangioendothelioma (Majdi *et al.*, 2011).

The **Basilic vein** is a large superficial vein of the upper limb that helps drain parts of the hand and forearm. It originates on the medial side of the dorsal venous network of the hand and travels up the

Indian Journal of Medical Case Reports ISSN: 2319–3832(Online) An Open Access, Online International Journal Available at http://www.cibtech.org/jcr.htm 2015 Vol. 4 (2) April-June, pp. 101-103/Ayyappan et al.

# Case Report

base of the forearm, where its course is generally visible through the skin as it travels in the subcutaneous fat and fascia lying superficial to the muscles.

As it ascends the medial side of the biceps in the arm proper, the basilic vein normally perforates the brachial fascia (deep fascia) above the medial epicondyle, or even as high as mid-arm. Then around the lower border of the teres major muscle, the anterior and posterior circumflex humeral veins feed into it, just before it joins the brachial veins to form theaxillary vein.

Patients have also presented with Recurrent Popliteal vein aneurysm (Garietta and Mohammad, 2010; Antonios *et al.*, 2010) and surprisingly spontaneous regression of a Portal vein Aneurysm has been published<sup>1.</sup> Venous aneurysms present with pain, swelling or compression on nearby vital structures. They also present with intraluminal thrombosis and pulmonary embolisation. Belcastro *et al.*, (2000) describe Infiltration, rupture and thrombosis of an IJV Aneurysm associated with Neurofibromatosis Type 1.

Lower limb venous aneurysms are commonly detected by Duplex Ultrasound, usually performed for varicose veins. Other Vein aneurysms are detected incidentally by CT/MRI scans. There is controversy regarding size of the vein, to call it an aneurysm. Some authors suggest twice the normal size (MacDevitt *et al.*, 1993), and some suggest three times the normal size (Maleti *et al.*, 1997).

Treatment options are many. Conservative for the asymptomatic venous aneurysm, to surgical options for symptomatic aneurysms. Surgical options include Excision, Aneurysmectomy with Venorrhaphy, and Aneurysmectomy with interposition vein graft or Prosthetic graft. Aneurysmectomy with end to end anastomosis can also be performed. Our patient underwent excision with no untoward complications and we was not on anti coagulants

All authors agree on anti coagulation for aneurysms with thrombosis, or with pulmonary embolisation. Anticoagulation is also advocated for those patients who underwent aneurysmectomy (Roberto *et al.*, 2010).

# REFERENCES

Antonios PG, Morad A, Robert JM, Cheng Lo and Nicos L (2010). Recurrent Popliteal vein aneurysm. *Journal of Vascular Surgery* **51** 453-7.

Garietta Falls and Mohammad Eslami (2010). Recurrence of Popliteal venous Aneurysm. *Journal of Vascular Surgery* **51** 458-60.

MacDevitt DT, Lohr JM, Martin KD and Sampson MG (1993). Bilateral Popliteal vein Aneurysm. *Annals of Vascular Surgery* 7 282-6.

Majdi el H, Nicole Banhaiem, Michel Vayssairat and Eric Allaire (2011). Masson's vegetant intravascular hemangioendothelioma in an external jugular vein aneurysm with recurrent thrombosis. *Journal of Vascular Surgery* 53 1723-5

Maleti O, Lugli M and Gollura M (1997). Aneyrsmes veineus poplitee experience personelle. *Phlebologie* 50 53-9.

**Mirko B, Andrea P, Ricardo T and Ruggero L (2011).** A rare case of internal jugular vein aneurysmal degeneration in a type 1 neurofibromatosis, complicated by potentially life threatening thrombosis. *Journal of Vascular Surgery* **54** 1170-3.

**Purandath Lall, Lohith Potineni and Hasan HD (2011).** Complete Spontaneous regression of an extra hepatic portal vein aneurysm. *Journal of Vascular Surgery* **53** 206-8.

Roberto G, Maria SR, Alessandro C and Roberto C (2010). Primary Tibial Vein Aneurysm with recurrent pulmonary emboli. *Journal of Vascular Surgery* 52 464-6.

Sessa C, Nicolini P, Perrin M and Farah I (2000). Management of symptomatic and asymptomatic Popliteal venous aneurysms, a retrospective analysis of 25 patients and a review of the literature. *Journal of Vascular Surgery* **32** 902-12.