

Rupture Related to Venous Aneurysm: A Case Report

Venöz Anevrizmaya Bağlı Rüptür: Olgu Sunumu

ABSTRACT

One of the most important factors in providing a well life quality in the patients with chronic renal failure(CRF) to which haemodialysis was applied, is the efficacy of the vascular Access path. The complications depending on Arteriovenous fistuls(AVF) may occur in early or late periods. When the treatment for these complications is not performed at the right time and in an accurate manner, irreversible damages in AVF may occur. In our study, we have represented the case of rupture related to the venous aneurysm in the patient whose left brachial AVF was exposed two years ago.

KEY WORDS: Arteriovenous fistula, Haemodialysis, Aneurysm

ÖZ

Kronik böbrek yetmezliği olan hemodiyaliz uygulanan hastalarda iyi bir yaşam kalitesinin sağlanmasında en önemli faktörlerden biri damar erişim yolunun etkinliğidir. Arterio venöz fistüllere(AVF) bağlı komplikasyonlar erken ya da geç dönemde ortaya çıkabilir. Bu komplikasyonlara yönelik tedavi doğru zamanda ve doğru şekilde yapılmadığında AVF'de geri dönüşümsüz hasarlar oluşabilir. Bu çalışmamızda, 2 sene önce sol brakial AVF açılan hastada gelişen venöz anevrizmaya bağlı rüptür olgusunu sunmaktayız.

ANAHTAR SÖZCÜKLER: Arteriovenöz fistül, Hemodiyaliz, Anevrizma

INTRODUCTION

Curative renal transplantation is carried out in the patients with chronic renal failure, but many patients are followed in Turkey by accessing the haemodialysis programme(1). The efficiency of haemodialysis is possible via the good vascular access path. For this reason, Brescia-Cimino is the standard treatment method because of easily AVF local anaesthesia, the decline of the early and late period complications, and available for many patient groups including paediatric case group (2,12). The complications related to AVF are bleeding, thrombosis, extremity ischemia, infection, odema, venous hypertension and venous aneurysms (3,13). If these complications are not intervened early and accurately, irreversible damages in AVF may occur. At the same time, it may threaten to life. We have represented the case

of ruptured venous aneurysm developing in relation to AVF.

CASE REPORT

45 year-old female patient's left brachial AVF was exposed in the outer center due to chronic renal failure two years ago. The stent was applied to cephalic venous owing to thrombosis in fistula a year later. The swelling in AVF in patient started six months later. Without any intervention, the patient was admitted to our emergency service due to venous aneurysm rupture and was immediately operated. She was operated under the local anaesthesia. She had bleeding related to the aneurysm rupture in distal cephalic venous in the left brachial AVF during peroperative exploration, and the bleeding was ruled out (Figure 1). It was seen that AVF anastomosis was ended to side.

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Received : 02.12.2012

Accepted : 19.02.2013

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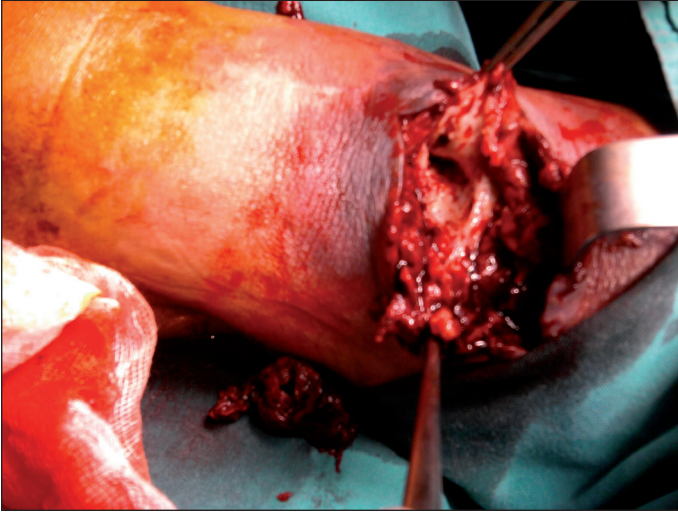


Figure 1: Peroperative imagine.



Figure 2: Resected stent.

By resection of aneurysm, AVF ligatured. The stent was detected in the distal cephalic venous by palpitation and removed by resecting (Figure 2). Because aneurysmatic tissue was in infected appearance, it was sent to culture. And left jugular temporary haemodialysis catheter was inserted. Appropriate antibiotherapy was started due to methicillin resistant staphylococcus aureus production in the aneurysmatic tissue. The right radial AVF was exposed in the patient within several days. The patient was discharged because the complication did not develop in her follow up.

DISCUSSION

To provide the permanent vascular Access path in haemodialysis patients is an important problem. AVF as the vascular Access path is the most often preferable method (4). Early and late period complications are seen in AVFs. The complications in early period are seen within the first six weeks. Swelling in hand and arm, dysfunction of AVF and maturation are among these complications.

AVF stenosis is seen when there is more than 50% in arterial input or venous output circulations. In side to side anastomosis in AVFs, early stenosis was founded lower than the cases in which end to side anastomosis was performed (5). In our study, it was observed that AVF anastomosis was end to side in peroperative exploration. Ballon angioplasty or surgical revision may be carried out in these patients (6). In our case report, it was detected that stent was applied because of the developing stenosis in cephalic venous a year after having been exposed. As the late period complication in AVFs exposed for haemodialysis, aneurysmal dilatation is most often observed. These are true aneurysms (7). If aneurysms are not treated, the symptoms related to local pressure and short term complications such as embolus, endocarditis or rupture and long term complications such as dilatation, venous hypertension and distal ischemia may

be seen (8). Our case was immediately operated due to rupture related to venous aneurysm. In the treatment of aneurysms related to arteriovenous fistula, the methods such as ligation, compression accompanied by ultrasonography, endovascular grafting implantation or thrombin injection are used (9). The surgery may be carried out by closing the fistula, together with ligation or by protecting the fistula continuity with the partial resection of aneurysm sack (10).

Since our patient came with rupture and bleeding, ligation and the closing of fistula were performed as the surgical treatment. In infected aneurysms, the resection of aneurysm sack is the preferable treatment option. Antibiotherapy treatment is recommended for six weeks because of endocarditis prophylaxis (6). In our study, antibiotherapy was applied to the patient for six weeks through the recommendations of infection clinic, and the patient was discharged without problem.

Consequently, the permanent vascular access path has the vital importance in the haemodialysis patients (11). The most of complications which will be able to develop from the usage of AVF in these patients should be followed up closely and the most appropriate treatment option should be given to the patient.

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