

Abstract

Subclavian Vein Occlusion

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Thrombosis or occlusion of the central vein is one of the usual complications of long term catheterization of the vein. In haemodialysis patients this occurs in about 35% of cases receiving subclavian dialysis catheter.

Between January 2009 and December 2011, 6 patients were reported in our hospital with venographically documented subclavian vein occlusion after the use of double lumen catheter for haemodialysis. In all these patients, the subclavian vein occlusion was completely masked, and became apparent clinically following formation of arterio-venous fistula on the same side as the initial catheterization. The arm which was normal in appearance started to be oedematous in the postoperative period and keep on increasing in size, reaching sometimes massive and limb threatening levels, with venous hypertension manifestations.

Treatment was done for 4 cases using endovascular technique by angioplasty and stenting procedure of the subclavian vein, which relieved the obstruction with good results. The other two cases were failed to be treated with the endovascular procedures, and were treated surgically. One of them was treated with occlusion of the arterio-venous fistula; and the other one was treated with a surgical bypass trick which also gave very good result.

In conclusion, the lack of clinical symptoms preoperatively warrant early use of duplex scan or venography to document or exclude the subclavian vein occlusion. If the occlusion was discovered postoperatively, the ideal treatment is angioplasty and stenting of the subclavian vein. If not feasible, the classical treatment is closure of the arterio-venous fistula, or if the fistula is very precious for the patient, still venous bypass tricks can be done.