

Embolization with Amplatzer vascular plug for a pseudoaneurysm resulting from surgical repair of recurrent aortic coarctation

Ben Hammamia M, Ghedira F, Boudiche S, Farhati A, Murali S, Denguir R
Service de Chirurgie cardiovasculaire La Rabta, Tunis, Tunisie

Introduction

The problem of patients who had one operation for coarctation of the aorta and who then require another because of a late complication at or near the coarctation site is a demanding one. The aim of this study is to demonstrate feasibility of using Amplatzer Vascular Plug device in the treatment of pseudoaneurysm resulting from surgical repair of a recurrent aortic coarctation.

Case report

We report the case of a 34-year-old patient who was admitted for chest pain. History of this patient revealed a surgical repair of aortic coarctation at the age of 7 using the Waldenhausen technique. At the age of 32, he developed a paraplegia caused by false aneurysm of the patch that led to a mass medullary compression. He underwent hybrid surgery with aorto-aortic bypass between the ascending aorta and the abdominal aorta with exclusion of the thoracic aorta by deployment of an occluder Medtronic device at the distal neck of the aneurysm. Actually, CT scan showed an endoleak with restoring of the pseudoaneurysm at the proximal neck by an 9 mm vessel between the ascending aorta and the pseudoaneurysm. With a percutaneous right radial approach, we placed a catheter in the aortic bypass graft and we spotted this vessel. Then, we performed embolization of this channel by deploying an Amplatzer Vascular Plug device III of 10*7 mm. The angiographic result was satisfactory patient became asymptomatic. Six months later, Ct scan showed disappearance of endoleak.

Discussion

Aortic pseudoaneurysm is a well-known late complication following surgical repair of coarctation. Despite primary success, 9% of patients develop aortic pseudoaneurysm at or near the site of repair long after the operation. Use of AVP in embolization of a pseudoaneurysm resulting from surgical repair of recurrent aortic recoarctation is rarely reported. Santoro et al, reported a transcatheter treatment of a complex aortic coarctation. They occluded an anomalous vessel with an Amplatzer Duct Occluder device. In this report, procedure was successfully achieved and post operative course was favorable.

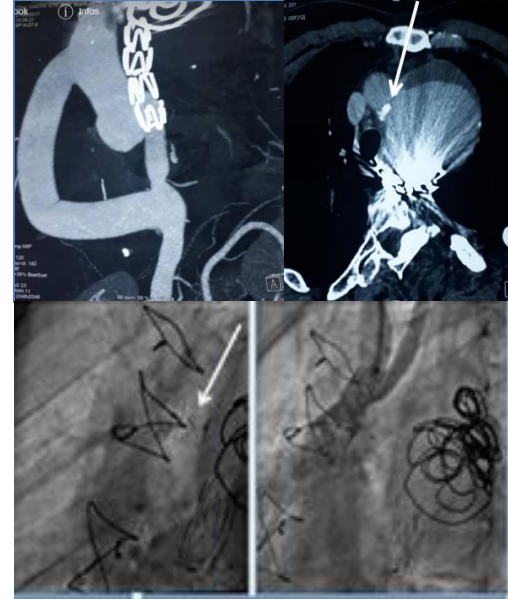


Figure : Procedure steps

Conclusion

Amplatzer Vascular Plug can be safely used in the treatment of recurrent aortic coarctation.