A Complex Case Of Aortic Dissection: A Hybrid Approach

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Introduction

In spite of the advances of aortic dissection's diagnose and therapeutic, it is still a complex vascular pathology with high mortality rate[1]. Due to its aortic wall fragility and remodeling, which can be a significant endoleak factor in endovascular treatment, chronic aortic dissection can complicate with symptoms, aneurysm degeneration and malperfusion syndromes[2].

Case Report

A 55 year-old male with arterial hypertension presented with chronic thoracic pain. The angio-CT revealed a Stanford type B aortic dissection from the descendent segment to the renal arteries associated with an 81,20 X 63,14 mm aneurysm and visceral perfusion mantained (FIG 1, 4). An EVITA 36X36X230 and EXCEL 32X32X130 mm endoprosthesis were placed near the left subclavian artery till the celiac trunk proximity (FIG 2).

FIG 1

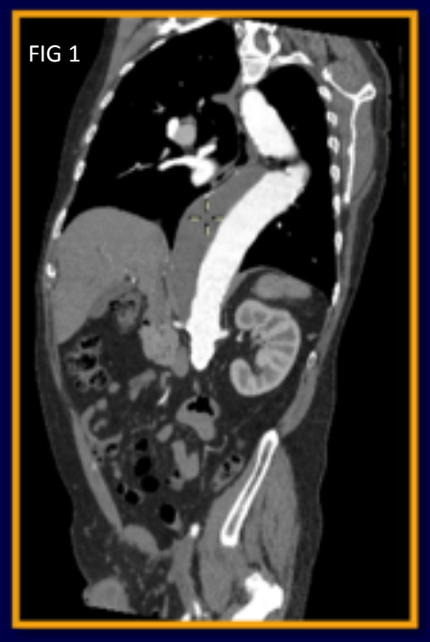
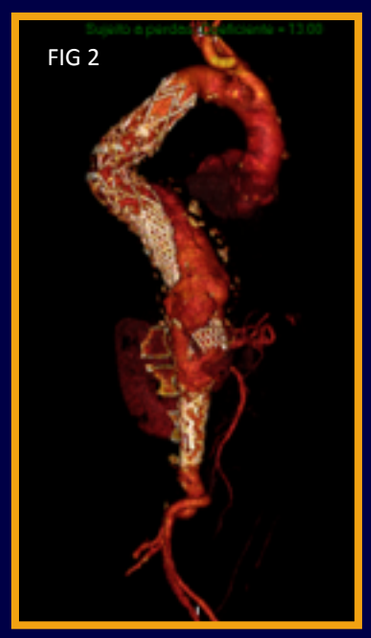
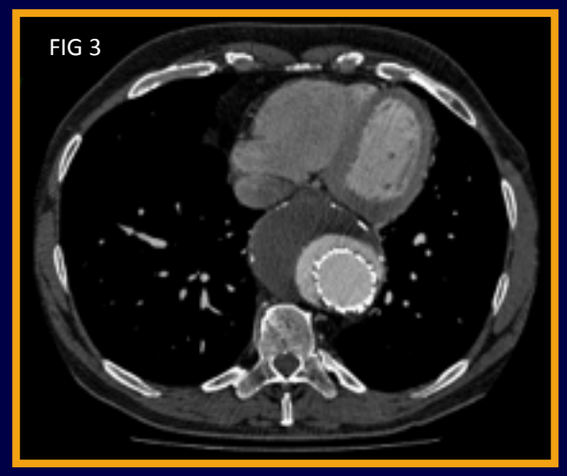


FIG 2



In a control angio-CT, a significant IB endoleak was seen (FIG 3) and, although the patient was asymptomatic and the aneurysm sac stable, it was treated with a VALIANT CAPTIVIA 40X40X160 mm endoprosthesis.

FIG 3



Due to a new thoracic pain and an increased of the aneurysm sac, he was successfully submitted to a visceral revascularization (left common iliac - bilateral renal arteries with Dacron and Dacron- superior mesenteric artery grafts) combined with another VALIANT CAPTIVIA 36X32X130 mm endoprosthesis implanted till renal arteries (FIG 5) – a two stages approach. The IB endoleak's therapy was accomplished and there were no complications related until the present.

Conclusion

The chronic aortic dissection and its approach must not be sub-estimated. Each case needs to be individualized and followed. Although endovascular techniques are being developed and increased, a hybrid therapy, associating it with conventional open surgery, can be required as an option to the aortic dissection successfull treatment.

FIG 4

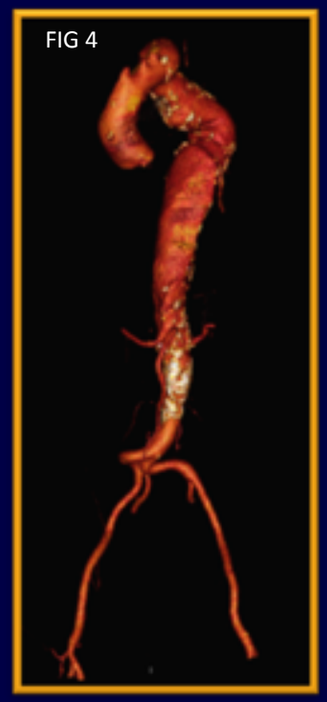
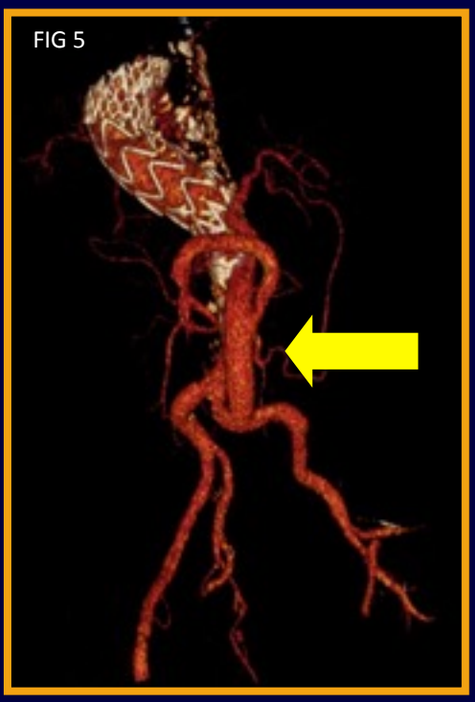


FIG 5



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2. Erbel R, Alfonso F, Boileau C, Dirsch O, Eber B, Haverich A, Rakowski H, Struyven J, Radegran K, Sechtem U, Taylor J, Zollikofer C, Klein WW, Mulder B, Providencia LA. Diagnosis and management of aortic dissection. *Eur Heart J* 2001;22:1642–1681 2.