

Reviewer #1:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: The authors report a case of type B aortic dissection, discovered incidentally in an asymptomatic octagenarian woman and submitted to endovascular repair. In general, the wording is adequate, with a good description of the fundamental points of the case. However, some details need to be clarified: 1. Despite the recommendations for the treatment of chronic aortic dissection, even in asymptomatic patients, a more elaborate justification for intervening in an 83-year-old patient whose diagnosis was incidental is convenient. Why not repeat CT in a few months (3-6 months) and assess growth? 2. The authors claim to use computational models to assess dissection etiology and resolution. However, it is not possible to understand how the proposed preoperative flow model can elucidate the etiology. I suggest changing this in the text. 3. The reason for reopening the occluded true lumen is unclear. If the concern was only with rupture, why not cover only the dilatation area after the left subclavian artery and keep the rest of the flow through the false lumen already chronically open? 4. Regarding Figure 1, it is necessary to clarify the length between the LSA and the beginning of the aneurysm and justify the need to cover this artery (Zone 3). 5. Why do the authors prefer to puncture the fabric of the endoprosthesis for placement of Fluency instead of using the chimney technique? 6. The patient was discharged after only five days. Were there any postoperative complications, considering that, in these cases, patients are discharged the next day? 7. It will be necessary to improve the arrangement of the figures. It is a little confusing... A. Fig 1 - OK B. Fig 2 - OK C. Fig 3. Here there are too many images to show pretty much the same thing. The 1st Figure in 3A is the same as in Fig 1B. d. Rather than putting repeat reconstructions of several aortic segments, I suggest transferring the aortic arc diameter, descending Ao, and true lumen diameters/areas over time into a simple table and putting in some key images to illustrate. As it is, we have lost focus on where to look. 8. Therefore, the paragraph "Aortic remodeling following TEVAR" can be condensed into a table. 9. Discussion is concise and proper. I consider that nine references are too few for a subject of this magnitude of complexity. If possible, insert references to other cases already published. Thus, it would be possible to justify the rarity of the intervention and its description. 10. English needs to be adjusted to scientific and technical language. There are still some grammatical errors.

1. First of all, there are indications for surgery. The patient is elderly, but it is not a contraindication to surgery. The preoperative assessment of the patient's condition is good and can tolerate TEVAR.

2. Using the computed tomography angiography (CTA) data collected by this patient at the initial visit and at 3 and 28 months after treatment, we also developed a computational model to observe hemodynamic changes before and after TEVAR.

3. The purpose of opening the true lumen of aortic dissection is to reduce the pressure of the false lumen of aortic dissection in order to obtain better aortic remodeling. Stent placement in the false lumen to isolate dissecting aneurysms also needs to cover the left subclavian artery because of the short length of the proximal landing area. Moreover, the

distal tear is small and the pressure in the false lumen is not reduced. There is still a risk of false lumen expansion or even rupture.

4. Type III aortic arch, dissecting aneurysm immediately adjacent to the left subclavian artery.(Fig.1D)

5. Chimney technique can reconstruct blood flow easily, but can resulting in endoleak risk. In-situ fenestration can extend the proximal landing zone, while allowing the stent to better attach to the aortic arch. The stent inserted into the branch artery can reconstruct blood flow while avoiding the risk of stent displacement. Coat material of ANKURA is relatively easy to fenestrate, the protocols of fenestration provided good results ultimately.

6. The patient was discharged without any incidence of paraplegia, neurological abnormalities, or other serious adverse events. Aortic endovascular surgery has not been included in the scope of day surgery in our hospital

7. Revised as required

8. Revised as required

9. Revised as required

10. Revised as required

Reviewer #2:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Major revision

Specific Comments to Authors: Comment #1: the pre-operative CT images (figure 1) do NOT convincingly show the describe pathology of true lumen collapse. The authors must provide 3D MPR reconstruction at the diseased proximal descending aorta, allowing to clearly understand the relationship between true and false lumen

Supplement MPR images as required