

INVITED COMMENTARY

## Extended Petticoat Strategy in Aortic Dissection: when Is It Too Much, or Not Enough?

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Kazimierczak and Rynio's article demonstrating an extended Petticoat technique to treat dissections is perfect for the Jugaar section of *European Journal of Vascular and Endovascular Surgery*.<sup>1</sup> With their extended technique, the authors try to prevent late aneurysmal degeneration of the aorta, the post-dissection thoraco-abdominal aneurysm (PDTAAA). PDTAAA occurs in a significant number of cases, irrespective of both the type of dissection and the treatment applied. As mentioned in the Introduction, TEVAR in acute type B dissection usually takes care of the proximal entry tear but fails to prevent further distal degeneration. It is therefore not surprising that more extensive techniques have been proposed over the years, such as "Petticoat" (extension with a bare metal stent into the abdominal aorta) or "Stabilise" (the same, but with additional ballooning to disrupt the dissection flap). With their extended Petticoat technique, the authors aim to "plaster" the aorta as far as the iliac bifurcations to re-establish the true lumen, eradicate the false lumen, and to prevent back flow. Is this the ultimate solution to address diffuse dissection?

The problem is that we do not have scientific evidence to support the technique, with the risk of impeding the "primum non nocere" (first, do no harm) principle. We have to keep in mind that a significant number of dissection patients will not develop an aneurysm, even without proximal TEVAR. The extended Petticoat technique proposed here may work well in selected patients, but we clearly need to define the patient subgroup that will benefit from it!

There is no doubt a place for each of the techniques mentioned in the treatment armamentarium, but we should probably not expand on the indications and over treat patients who would do well with less invasive techniques or even medical treatment alone.<sup>2</sup>

Interestingly, the literature on acute and subacute dissection seems to try to define anatomical criteria that put the patient at higher risk of PDTAAA. This work is largely described in Asian patients, and perhaps should not be extrapolated 1:1 to Caucasians. In addition, the set up of these studies seems to carry an inherent bias. We seem to be looking for reasons to treat dissection patients. On the other hand, it is only fair to accept that medical treatment alone is not the Holy Grail, as a significant number of patients will suffer dissection related complications during follow up.<sup>2,3</sup>

Therefore, we need to design unbiased studies to define better criteria on when and how to treat the patients. In addition, one should keep in mind that we have now developed different techniques to treat PDTAAA with success!<sup>4</sup>

I nevertheless congratulate the authors for their innovative work and for sharing it - this is exactly why this journal has a Jugaar section!

### REFERENCES

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