

INVITED COMMENTARY

More Light on Isolated Mesenteric Artery Dissection from the Countries of the Rising Sun

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In their paper, Jia et al. report on the experience of treating isolated mesenteric artery dissection (IMAD) in four major Chinese vascular centres.¹ This disease is rare in Europe, but not so uncommon in East Asia. Most of the existing knowledge emanates from case series from China, Korea, and Japan. The same authors recently published a paper on 38 patients with IMAD treated by stenting or coiling.² They have now extended the case series by adding one more hospital, and reporting on the entire patient cohort ($n = 123$), including those treated conservatively ($n = 89$) and those who underwent endovascular intervention ($n = 34$) due to failure of conservative treatment. The main and novel finding is that patients with Sakamoto classification type II (i.e., there is an entry tear, but no re-entry, and yet no false lumen thrombosis),³ and those with a stenosis $>90\%$, were at a very high risk of treatment failure. Although it was expected that patients with type II dissection could be more prone to dilatation, and that a tight stenosis also could be dangerous, to my knowledge this has not been shown previously.

This paper adds important novel data to help us with the management of IMAD. Previous papers have been descriptive, including the different suggested classification systems. At least six different classification systems have been suggested from different single centre series. When the European Society for Vascular Surgery (ESVS) Mesenteric Guidelines were developed,⁴ two were more commonly used than the others, those of Sakamoto et al.³ and of Yun. This paper is the first to link the classification system to the prognosis in a large unselected cohort, which is a major contribution. I also find it commendable that the authors were able to collaborate in a multicentre study. This is the way forward! There are far too many single centre series that add nothing to the existing literature. However, merging prospective data from many collaborating centres can create new knowledge, which has been shown beautifully in this paper. Maybe using the technology of registry collaboration that has been developed within Vascunet should be considered.⁵

When the ESVS Mesenteric Guidelines are to be updated, this paper will probably be one of the key new references, improving the level of evidence. Yet, it should be noted that there is nothing in this paper that contradicts the four recommendations of the present guidelines:⁴

- Rec. 61: In patients with asymptomatic IMAD, conservative treatment with antiplatelet therapy and control of hypertension should be considered (Class IIa, Level C).
- Rec. 62: Patients with symptomatic IMAD should be considered for treatment with antiplatelet therapy or low molecular weight heparin or unfractionated heparin until symptoms resolve (Class IIa, Level C).
- Rec. 63: Patients with a symptomatic IMAD not responding to medical management and with a suspicion of bowel ischaemia should be considered for endovascular revascularisation (Class IIa, Level C).
- Rec. 64: Follow up with imaging should be considered after IMAD to detect aneurysm formation, occlusion, or stenosis (Class IIa, Level C).

The clinical knowledge of this condition has always been greatest in Eastern Asia. By adding the scientific methodology, we can all learn how to treat these patients.

REFERENCES

- 1 Jia Z, Chen W, Su H, Shi H, Xu Q, Ni G, et al. Factors associated with failed conservative management in symptomatic isolated mesenteric artery dissection. *Eur J Vasc Endovasc Surg* 2019;58:393–9.
- 2 Jia Z, Su H, Chen W, Ni G, Qi C, Gu J. Endovascular treatment of patients with isolated mesenteric artery dissection aneurysm: bare stents alone versus stent assisted coiling. *Eur J Vasc Endovasc Surg* 2019;57:400–6.
- 3 Sakamoto I, Ogawa Y, Sueyoshi E, Fukui K, Murakami T, Uetani M. Imaging appearances and management of isolated spontaneous dissection of the superior mesenteric artery. *Eur J Radiol* 2007;64:103–10.
- 4 Björck M, Koelemay M, Acosta S, Bastos Goncalves F, Kolbel T, Kolkman JJ, et al. Editor's choice - management of the diseases of mesenteric arteries and veins: clinical practice guidelines of the european society of vascular Surgery (ESVS). *Eur J Vasc Endovasc Surg* 2017;53:460–510.
- 5 Björck M, Mani K. Editorial: publication of vascular surgical registries: strengths and limitations. *Eur J Vasc Endovasc Surg* 2017;54:788.

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