INVITED COMMENTARY

Commentary Regarding "Computed Tomography Imaging Features and Classification of Isolated Dissection of the Superior Mesenteric Artery"

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Isolated superior mesenteric artery dissection (SMAD) is a pleiomorphic disease. A systematic approach requires adequate classification. The purpose of classification is to organize patients into groups, which should be clinically informative in order to assist medical decision making. Four classification systems, which were all devised based on the imaging appearance of the SMAD, have been proposed over recent years;[1–4] however, no consensus has emerged regarding which classification system should be used.

Sakamoto et al.[1] categorized SMAD into four types. However, they did not consider the type of total thrombotic occlusion of the SMA. Yun et al.[2] categorized SMAD into three types, but they did not consider thrombosed false lumen with ulcer-like projection. Zerbib et al.[3] categorized SMAD into six types. However, SMAD with retrograde propagation of the false lumen to the SMA ostium wasn't addressed. Luan and Li[4] categorized SMAD into four types, but they did not consider the true and the false lumen itself, such as the shape, the thrombosed false lumen, and stenosis of the true lumen.

The main anatomic and physio-pathologic features of SMADs are the location, extent of the false lumen, and the distinction between thrombosed or not false and true lumen. All four classification systems take into account some of these anatomic features. However, they are all incomplete. What we need is a simple system that allows exhaustive description of all anatomic types of SMADs and meets both the capabilities of modern imaging techniques and the demands of an ever-growing treatment armamentarium.

REFERENCES

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4 Luan JY, Li X. Computed tomography imaging features and classification of isolated dissection of the superior mesenteric artery. Eur J Vasc Endovasc Surg 2013;46:232–5.

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CORRESPONDENCE

Response to 'Re. Computed Tomography Imaging Features and Classification of Isolated Dissection of the Superior Mesenteric Artery'

We thank Dr. Jia and his colleagues for their comments on our recently published paper.[1] And we agree that a simple and comprehensive classification scheme is needed to describe the imaging features of the superior mesenteric artery dissection. However, it is technically difficult to include all imaging features, such as the location and length of dissection, and whether the true lumen and false lumen are thrombosed or occluded, in one classification scheme.

The previous three classification schemes are all based on the view of radial point and whether the true lumen and false lumen are occluded or thrombosed. As total thrombotic occlusion of the superior mesenteric artery is not included in Sakamoto's classification scheme,[2] and Zerbib's classification scheme[3] is too complicated to apply in clinical practice, Yun's classification scheme[4] seems to be the simplest and most commonly used one.

From an axial point of view, our classification scheme is based on the location and length of the dissection and correlates with the pain severity. Thus, the dissection of the superior mesenteric artery can be well described by this scheme combined with Yun's classification scheme. For example, when a dissection is limited to the curved part of the superior mesenteric artery with visible false lumen but without visible re-entry site, we may describe it as a type B-