

LETTERS TO THE EDITOR

Regarding “Ischemic intestinal involvement in a patient with Buerger disease: Case report and literature review”

In their recent article, Dr Kobayashi et al report on a case of intestinal Buerger’s disease.¹ They also review the literature for all published cases of this rare disease location. However, the authors omitted from their literature review, which includes 26 published cases, our case report, entitled “Thromboangiitis obliterans (Buerger’s Disease) in visceral vessels confirmed by angiographic and histological findings,” published in the *European Journal of Vascular Endovascular Surgery* in 1998.² We certainly think that this was by coincidence; we report it only for the purpose of completing the review in the literature. In our case we could show by selective superior mesenteric artery angiogram the corkscrew collateral network, characteristic of Buerger’s disease, in addition to tapering of arterial segments in the intestinal arterial circulation. These angiographic patterns are one of the standard criteria for establishing the chronic angiographic course of Buerger’s disease in the limbs. We also showed histologic findings compatible with Buerger’s disease in an intermediate stage of the disease.

The authors in their case report did not perform a selective angiogram of the superior mesenteric artery because the patient presented with acute renal failure. The aortogram shows massive arterial thrombosis of both the internal and external iliac arteries as well as of the superior mesenteric artery after bilateral femoral thrombectomies. No (angiographic or histologic) evidence exists for Buerger’s disease involvement at the iliac arterial level in this patient. Therefore, the clinical course could be explained by a proximal thrombotic extension after unsuccessful bilateral femoral thrombectomies. Whether superior mesenteric artery thrombosis was a Buerger’s disease manifestation or was a part of a generalized proximal thrombotic process cannot be confirmed. Additionally, the authors do not report whether a complete evaluation for a prothrombotic hematologic disease was performed.

The authors report histologic findings of arterial thrombosis of resected intestinal segments compatible with Buerger’s disease. However, we feel that the diagnosis cannot be established only by histologic findings reported as “organized thrombi, with an essentially intact elastic lamina and inflammatory cell infiltration” because even a secondary massive arterial thrombosis could show the same histologic appearance in a necrotic tissue. The authors report, “At laparotomy, the ileum end, cecum, and proximal side of the ascending colon and sigmoid colon were necrotic.” Histologic confirmation of Buerger’s disease needs specimens of early or intermediate stages of this chronic disease and not specimens of a necrotic tissue.^{3,4}

The rarity of organ involvement in Buerger’s disease makes the diagnosis difficult despite the clearly established diagnostic criteria for Buerger’s disease of the limbs. Diagnosis of Buerger’s disease outside the limbs is an open issue until standard criteria are recommended. We propose that the diagnosis of Buerger’s disease concerning tissue or organ—except the limbs—can be made when (1) the patient fulfills all classic diagnostic criteria for Buerger’s disease of the peripheral vessels, (2) he or she presents with signs/symptoms of arterial ischemia of the involved organ, and (3) all angiographic and histologic findings of Buerger’s disease in the arterial supply to the involved organ are present.

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REFERENCES

1. Kobayashi M, Kurose K, Kobata T, Hida K, Sakamoto S, Matsubara J. Ischemic intestinal involvement in a patient with Buerger disease: case report and literature review. *J Vasc Surg* 2003;38:170-4.
2. Michail P, Filis K, Delladetsima J, Koronarchis D, Bastounis E. Thromboangiitis obliterans (Buerger’s disease) in visceral vessels confirmed by angiographic and histological findings. *Eur J Vasc Endovasc Surg* 1998; 16:445-8.
3. Lie J. Thromboangiitis obliterans revisited. *Pathol Ann* 1988;23:257-91.
4. Leu H. Early inflammatory changes in thromboangiitis obliterans. *Pathol Microbiol* 1975;43:151-6.

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Reply

We thank Drs Filis and Arko for their comments and discussion on our article on our case of intestinal Buerger’s disease.

Their letter addresses two issues: angiographic findings of superior mesenteric artery (SMA) and histology of affected vessels.

First, in this particular case, an aortogram was performed not to confirm patent SMA but to confirm patency of both iliac arteries one day after the emergent operation. Selective angiogram was not considered to avoid further renal damage and we could not state that SMA had typical angiographic findings of Buerger’s disease because not enough contrast material was injected in this series. From that point of view, selective angiogram would be helpful to establish definite diagnosis.

Second, we reported histologic findings of involved vessels of resected specimens. Based on our histologic examination, intimal elastic lamina was essentially intact and inflammatory cell infiltration was mainly seen in intima, findings that were different from acute arterial thrombosis as opposed to acute and subacute stage of Buerger’s disease. We believe that prior to a thrombotic event, inflammation occurs in Buerger’s disease, and in case of acute arterial occlusion inflammation can be seen in all three layers. We will try immunohistochemical analysis of infiltrating cells to elucidate pathogenesis of the affected vessels in this case.¹

Lastly, we agree that the criteria of organ Buerger’s disease proposed by Filis et al in their article is reasonable. However, in an emergent case like our case, selective angiogram could not be done without any previous abdominal symptom.

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REFERENCE

1. Kobayashi M, Ito M, Nakagawa A, Nishikimi N, Nimura Y. Immunohistochemical analysis of arterial wall cellular infiltration in Buerger’s disease (endarteritis obliterans). *J Vasc Surg* 1999;29:451-458.

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