Intramural Hematoma of the Ascending Aorta: A Form of Aortic Dissection With the Highest Risk?

To the Editor:

I read with great interest the article by Evangelista et al1 about intramural hematoma (IMH) of the aorta. The study population comprised a subgroup of 12 patients with IMH of the ascending aorta for whom initial conservative treatment was recommended. This seems somewhat surprising in view of the fact that after a median follow-up of 43 months, 9 patients had undergone surgery, 3 of whom died postoperatively. Of the remaining 3 patients, only 1 survived. This amounts to an actual mortality of 42% (5 out of 12 patients), which is much higher than what could be expected after primary surgery. Even after surgical treatment of an acute ascending aortic dissection, a 10-year survival rate of 74% has been demonstrated.2

By their data, the authors confirm observations of a meta-analysis carried out by Maraj et al,3 in which a high complication rate of IMH of the ascending aorta was recognized. Most complications led either to death or to emergent surgery associated with a high risk. Therefore, the question is: what would the survival rate have been if the patients had been operated on before complications occurred? Surgery of an acute dissection localized in the ascending aorta provides good short- and long-term results.2,4 This applies all the more to a limited dissection with a thrombosed false lumen which, from the clinical point of view, is synonymous with an intramural hematoma. Considering the prognosis of IMH as described above, I believe surgery is indicated whenever the diagnosis of an intramural hematoma is made. Conservative therapy with repeated imaging does not seem to have any advantages and increases the costs as well. In many cases, the delay forces the patient to pay the highest price: his or her life.

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Response

Dr Urbanski raises an important issue related to the appropriate therapy of type A aortic intramural hematoma (IMH). However, our study was focused on the long-term evolution and morphological changes of IMH showing the frequent evolution to aneurysm or pseudoaneurysm (54%), particularly in the descending aorta.3 As in our series, type A IMH was limited to 12 patients; such a small number would not have permitted any conclusion related to type A IMH therapy to be drawn.

No general consensus exists on the appropriate treatment of ascending aorta IMH. Some groups believe that the therapeutic strategy for IMH should be the same as that for aortic dissection. In a meta-analysis,2 mortality of type A IMH treated medically was high, 56%. However, Asian series3–5 showed low death rates in proximal IMH treated medically (6% to 10%). Song et al6 reported that 64% of medically treated type A IMH evolved without complications; most of them exhibited complete IMH resorption. The evolution of type A IMH appears to be more benign than that of classical dissection. Kaji et al4 showed that medical therapy with timely surgical repair in cases with progression can also be a rational therapeutic strategy. Several factors such as maximum aortic diameter, IMH thickness, age, and pericardial or periarterial blood extravasation have been related to poor outcomes.1–5 Studies are required to verify the benefit of emergency surgery in patients without these poor prognostic factors compared with repeated imaging monitoring, with surgery being indicated in complicated cases.

None of these issues is addressed in our study, which is mainly descriptive in character.

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