4. Conclusions

Intercostal pseudoaneurysm are a potential source of complications, especially haemothorax, and treatment is mandatory. This is the first reported case of intercostal artery pseudoaneurysm treated by Doppler ultrasound-guided percutaneous thrombin injection. The method allows efficacious, rapid treatment of the lesion with few complications.

References


eComment: It could be an iatrogenic arteriovenous fistula

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In this article, Fernandez Alonso et al. describe a very interesting case of post-sternotomy pseudoaneurysm formation and an easy diagnosis and treatment using ultrasound-guided percutaneous thrombin injection [1]. However, some questions must be addressed:

The authors did not use CT-scan or arteriography diagnosis, however an iatrogenic mammary or intercostal arteriovenous fistula must have been ruled out. Two possible causes of poststernotomy fistulas [2-5] have been suggested. One cause is trauma produced by the sternal wire, which generates a fistulous communication between the artery and the vein and a hematoma, which causes the pseudoaneurysm. In some cases the hematoma could extend subcutaneously along the passage of the sternal wire. The other cause postulated is trauma in the region caused by retraction or electrocautery during operation. At what level of the second intercostal space did the pseudoaneurysm appear? Was it subcutaneous or intrathoracic?

There is a risk of fistula recurrence if there is only pseudoaneurysm occlusion or anterograde artery embolization due to retrograde flow via epigastric artery. In such cases, as we reported some years ago, we recommend embolization of the anterograde and retrograde pedicles [5].

References