Splenic infarction and abscess after endoscopic injection of hypertonic saline-epinephrine solution administered for bleeding gastric ulcer

A 68-year-old woman with diabetes mellitus presented with bleeding from a gastric ulcer that had not been treated previously. Upon admission she was found to be anemic (red cell count 2.66 × 10⁹/µl, Hb 8.4 g/dl). Endoscopy revealed a large amount of coagulated blood in the stomach, and bleeding from an open ulcer containing a distinctly visible blood vessel (Fig. 1). Endoscopic sclerotherapy with hypertonic saline–epinephrine (HSE) was performed. The bleeding stopped with injection of 12 ml HSE. On the day after the initial endoscopic sclerotherapy, the anemia worsened, so repeat endoscopic sclerotherapy was performed. The vessel that was noted in the previous endoscopy was persistent. An additional 27 ml HSE was injected. On day 3 after the second endoscopic sclerotherapy, the patient developed high fever (39°C) with upper abdominal pain. Enhanced computed tomography (CT) showed a large hypodense area in the spleen, characteristic of infarction (Fig. 2). Intravenous antibiotic therapy was initiated, following which the abdominal pain disappeared, but the high fever persisted. On day 13 after admission, arteriography was performed, and the splenic artery was found to be obstructed (Fig. 3). The high fever continued for more than 7 days; hence, enhanced CT was repeated and revealed a large splenic abscess. A laparotomy was performed. The whole spleen was found to be necrosed and was debrided. The splenic artery was sclerosed by HSE injection, and there was no bleeding from the splenic artery. The postsurgical clinical course was uneventful, and the patient was discharged on day 24 after surgery.

To the best of our knowledge, this is the first reported case of splenic infarction and abscess that developed after HSE injection administered for a bleeding gastric ulcer. Splenic infarction and abscess should be considered in a patient with persistent high fever and pain after endoscopic injection therapy. The use of adhesive agents and small amounts of sclerosants and slow injection speed are recommended for endoscopic injection therapy [1].

Endoscopy_UCTN_Code_CPL_1AH_2AC

T. Oida¹, K. Mimastu¹, A. Kawasaki¹, Y. Kubol¹, H. Kano¹, S. Amano²

¹ Department of Surgery, Social Insurance Yokohama Central Hospital, Yokohama, Japan
² Department of Surgery, Nihon University School of Medicine, Tokyo, Japan

References

Bibliography
Endoscopy 2008; 40: E239
© Georg Thieme Verlag KG Stuttgart - New York - ISSN 0013-726X

Corresponding author
T. Oida, MD, PhD
Department of Surgery
Social Insurance Yokohama Central Hospital
268 Yamashita-cho, Naka-ku
Yokohama
231-8553
Japan
Fax: +81-45-6719872
ooida.takatsugu@yokochu.jp

Oida T et al. Splenic infarction and abscess after endoscopic sclerotherapy... Endoscopy 2008; 40: E239