Acute Ischemia Followed by Hemorrhagic Gastric Necrosis After Injection Sclerotherapy for Ulcer

A 58-year-old man with a history of nonsteroidal anti-inflammatory drug treatment, presented with a severe upper gastrointestinal hemorrhage. Endoscopy showed two gastric ulcers, in the antrum and on the greater curvature of the gastric body. The ulcer in the body had a visible vessel in its center.

Polidocanol was injected into the gastric body ulcer 2 mm distal to the visible vessel. Immediately after insertion of the needle and injection of 0.1 ml, the surrounding 5 cm of gastric mucosa became white. The involved portion of the mucosa was well demarcated. Within 30 seconds, this part of the mucosa changed to a red-violet color, and eight hours later, the mucosa was edematous and hemorrhagic. The patient was treated with omeprazole, and was not allowed to eat or drink. Eight days later, the patient presented with a severe relapse of upper gastrointestinal bleeding. Endoscopy showed multiple bleeding ulcerations in the ischemic area. The bleeding could not be controlled, and the patient underwent a resection of the ulcerated region of the stomach. The postoperative course was uneventful. Histopathological analysis confirmed the diagnosis of ischemic necrosis.

Gastroduodenal ischemic necrosis after sclerotherapy for bleeding gastroduodenal ulcers is rare. Only a few cases have been reported (1-4). In the reported cases, the necrosis always occurred after the injection of several milliliters of sclerosant, and only in one case an immediate alteration of the mucosa was descibed (3). In view of the minimal amount of sclerosant injected and the sudden total ischemia, a direct mechanical lesion of a gastric artery by the needle, followed by immediate obliteration of the arterial lumen, was probably the cause of the ischemia.

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