

Delayed life-threatening splenic rupture after endoscopic ultrasound evaluation of a pancreatic tumor

Diagnostic endoscopic ultrasound is an extremely safe technique with the majority of complications occurring after interventional procedures [1]. We report here a patient who developed life-threatening intra-abdominal bleeding as a result of a diagnostic procedure.

A 59-year-old woman was referred to a tertiary center for endoscopic ultrasound assessment of a pancreatic lesion. As the lesion was deemed potentially resectable, fine-needle aspiration was not carried out. The procedure was completed within 30 minutes as an outpatient and no immediate complications were recorded. The patient was admitted to our hospital 72 hours later because of a 6-hour history of left upper quadrant pain radiating to her left shoulder. Vital signs were stable on admission and hemoglobin was 131 g/L. Three hours later her pain suddenly increased and she became hypotensive. Repeat blood tests showed a drop in hemoglobin to 62 g/L. Urgent computed tomography (CT) revealed extensive, free intra-abdominal fluid in keeping with hemorrhage and associated disruption in the upper portion of the spleen (● Fig. 1).

An emergency laparotomy revealed active bleeding from the superior portion of the spleen, which was torn and lacerated. Splenectomy was successfully carried out. Splenic injury has been described after colonoscopy [2,3] and very rarely after endoscopic retrograde cholangiopancreatography [4], but to our knowledge never after endoscopic ultrasound. The mechanism in the present case was probably



Fig. 1 Abdominal computed tomography (CT) scan demonstrating significant hematoma around the upper pole of the spleen.

related to traction on the short gastric vessels. Splenic trauma should be considered in any patient presenting with upper abdominal pain or drop in hemoglobin after an endoscopic procedure.

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