

An unexpected complication during EUS-FNA

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A 73-year-old diabetic and hypertensive male patient presented with progressive dysphagia and marked weight loss. There is no intake of antiplatelets or anticoagulants. Upper endoscopy revealed distal esophageal stricture with inconclusive biopsy results, so he was referred for EUS evaluation.

First, a linear echoendoscope was advanced into the distal esophagus where a short esophageal stricture was encountered at 33 cm from the incisors. There was an esophageal wall circumferential hypovascular mass in the

most distal 4 cm with loss of wall layer differentiation, raising the possibility of a malignant neoplasm [Figure 1]. EUS-FNA was done using a 22G needle (EchoTip, Wilson-Cook) by conventional tissue actuation method with the aid of stylet and suction [Figure 2]. Instantaneous bleeding inside the lesion was evident endosonographically by observing a dense turbid fluid collection within the lesion [Figure 3] and endoscopically by further narrowing of the lumen as a result of newly formed hematoma [Figure 4]. A forward-viewing endoscopy was then

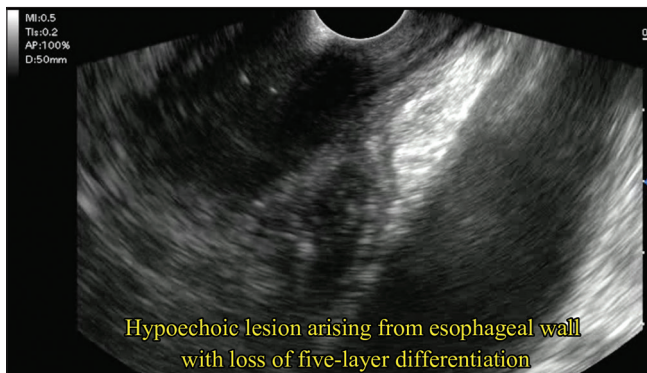


Figure 1. A soft tissue lesion is infiltrating the distal esophageal wall with loss of wall layer structure



Figure 2. EUS-FNA of the distal esophageal wall lesion

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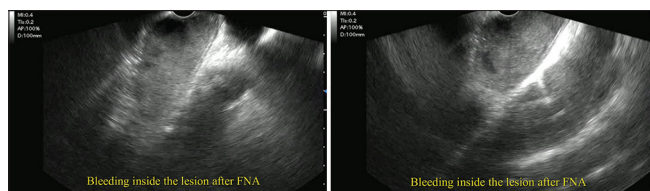


Figure 3. Post-EUS-FNA wall hematoma as seen by EUS (left panel). Post-EUS-FNA wall hematoma (another view, right panel)

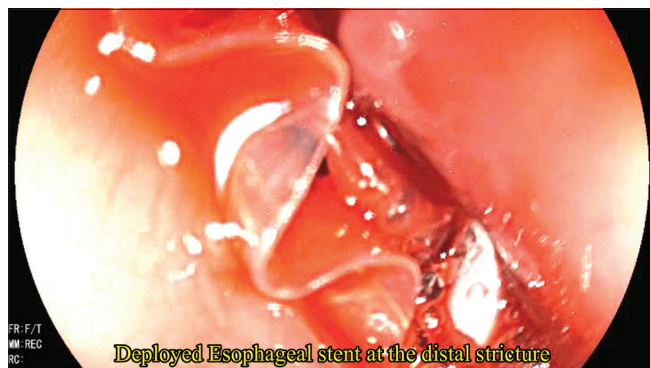


Figure 5. The proximal end of the first deployed self-expandable metal stents

introduced, and a Savary guidewire was passed through the narrowed lumen. An 11 cm/18 mm partially covered metal stent (self-expandable metal stents) was deployed at the site of stricture [Figure 5], and then, a second similar one was inserted proximal to the first one (stent-in-stent technique) with its proximal end above the upper level of the hematoma to act as a hemostatic scaffold and to dilate the partially obstructed lumen by the hematoma [Figure 6]. Follow-up period after the procedure was uneventful and the patient was discharged after 2 days. Cytopathological analysis revealed esophageal adenocarcinoma.

EUS-FNA is an established standard method for tissue acquisition from different gastrointestinal tumors and strictures. Reported overall adverse event from EUS-FNA was 0.98% that included a bleeding rate of 0.13% in recent meta-analysis.^[1] EUS-FNA is considered a high-risk procedure according to the guidelines of the European and American Society of Gastrointestinal Endoscopy,^[2,3] especially in patients taking antithrombotic agents which should be stopped before the procedure. However, bleeding is still possible even after these drugs had been stopped.^[4] Although very uncommon, we have demonstrated that bleeding is a potential adverse event of EUS-FNA and attention should be taken during and after this procedure.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given his consent for his images and other clinical information to be reported in the journal. The



Figure 4. Post-EUS-FNA wall hematoma as seen by upper endoscopy

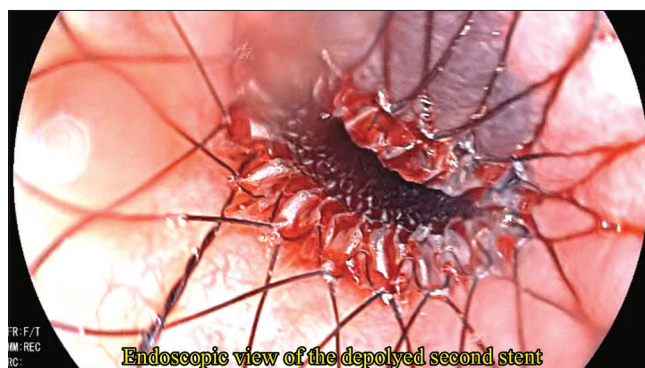


Figure 6. The proximal end of the second deployed self-expandable metal stents

patient understands that his names and initials will not be published and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

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Nil.

Conflicts of interest

Hussein Hassan Okasha is an Editorial Board Member of the journal. The article was subject to the journal's standard procedures, with peer review handled independently of this Member and his research groups.

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