Although extrinsic compression of the gastric wall by an intact splenic artery is a common observation, the characteristic endoscopic ultrasound (EUS) findings of small splenic artery aneurysm (SAA) have not yet been established.

We present four symptom-free patients who were diagnosed as having extragas-tric compression from a small SAA in the early stage, at the posterior wall of the fundus, by EUS.

<table>
<thead>
<tr>
<th>Patient (age in years/sex)</th>
<th>Symptoms</th>
<th>EGD findings</th>
<th>EUS findings</th>
<th>3D-CTA findings</th>
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<tr>
<td>1 (53/F)</td>
<td>None</td>
<td>SMT</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>2 (64/M)</td>
<td>None</td>
<td>SMT</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>3 (58/F)</td>
<td>None</td>
<td>SMT</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>4 (57/F)</td>
<td>None</td>
<td>SMT</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

SMT, submucosal tumor; SDS, segmental dilatation of the splenic artery; CGW, compression of the gastric wall.

Screening EGD seemed to reveal a submu-cosal tumor on the posterior wall of the fundus in all the patients (Fig. 1). However, EUS revealed a normal gastric wall compressed by a focally dilated aneurysm (Fig. 2), and an arterial pulsation signal was detected by pulse-wave Doppler ultrasound (Fig. 3). 3D-CTA revealed these submucosal masses to be small SAAs. Patient 2 had an aneurysm (15-mm diameter) at the hilum of the splenic artery (Fig. 4). There was no change in the SAAs in any of the patients at a 3-month follow-up with 3D-CT.

SAA is the most common visceral artery aneurysm [1, 2], and although asymptomatic when small, 3%–10% of SAAs are at risk for rupture [3, 4]. Aneurysms should be considered in the differential diagnosis of endoscopically detected submucosal lesions to avoid potentially
harmful outcomes of EUS-guided fine needle aspiration or biopsy. EUS may be a reliable initial diagnostic modality for the diagnosis of even small SAAs (≤ 15-mm diameter), primarily to differentiate between true submucosal tumors and extrinsic compression of the gastric wall caused by normal or pathological structures.

Competing interests: None

Endoscopy_UCTN_Code_CCL_1AF_2AD

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References

Bibliography
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