A pseudosarcomatous lesion resembling a malignant tumor of the esophagocardiac junction, diagnosed by a total biopsy with endoscopic surgery

A pseudosarcomatous lesion is a benign lesion resembling sarcoma either clinically or histologically, which often leads to unnecessary or excessive treatments, including esophagectomy [1–3]. This report presents a case of a pseudosarcomatous lesion which was correctly diagnosed by a total biopsy with endoscopic submucosal dissection (ESD) [4].

A 60-year-old man was examined by esophagogastroscopy to screen the upper gastrointestinal tract. A 5-mm elevation with a thick white coating was detected in the lower esophagus (Fig. 1 a). Narrow band imaging (NBI) [5] revealed petal-like clusters of regularly dilated capillaries through a crack in the white coating (Fig. 1 b).

Histological examination of biopsy specimens showed dysplastic spindle cells with no immunoreactivity for epithelial or mesenchymal markers other than vimentin (Fig. 2 a), thus suggesting spindle cell sarcoma. The lesion was not clinically consistent with a typical sarcoma, therefore ESD was performed to make a definitive diagnosis. Histological examination of the specimen showed granulation tissue with augmentations of vessels and spindle-shaped cells. Atypical-grade tissue tended to become less atypical in the deeper areas of the lesion (Fig. 2 b, c), thus resulting in a final diagnosis of reactive inflammatory granuloma with no tumorous component.

This case suggests that a total biopsy by ESD, which can accurately control the depth of submucosal exfoliation under endoscopic view [4], is helpful for the diagnosis of sarcoma-like lesions, thereby avoiding excessive treatments including esophagectomy. From the 18 reported cases of esophageal pseudosarcomatous lesions (Table 1), a polypoid lesion with ulcers and reflux esophagitis is a typical endoscopic finding. The present case shows the characteristic NBI findings for a pseudosarcomatous lesion, which may be key for discrimination of pseudosarcomatous tissue from malignant lesions.
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<tr>
<td>57</td>
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<td>43</td>
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<tr>
<td>59</td>
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<td>Polypoid mass with ulceration</td>
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<td>Suspicious for squamous cell carcinoma</td>
<td>Segmental resection</td>
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<tr>
<td>73</td>
<td>F</td>
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<td>Stricture mass ND</td>
<td>ND</td>
<td>ND</td>
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<tr>
<td>70</td>
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<td>ECJ</td>
<td>Melena</td>
<td>Small polypoid lesion with ulceration and erosion</td>
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<td>ND</td>
<td>Polypectomy</td>
</tr>
<tr>
<td>60</td>
<td>M</td>
<td>ECJ</td>
<td>None</td>
<td>Small polyp with erosion and linear erosion at oral side</td>
<td>None</td>
<td>ND</td>
<td>Polypectomy</td>
</tr>
</tbody>
</table>

**Table 1** Reported cases of pseudosarcomatous lesion in the esophagocardiac junction or esophagus.

- F, female; M, male; ND, not described; ECJ, esophagocardiac junction.

**References**


**Bibliography**

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