

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) [1–3, 6–9], 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.

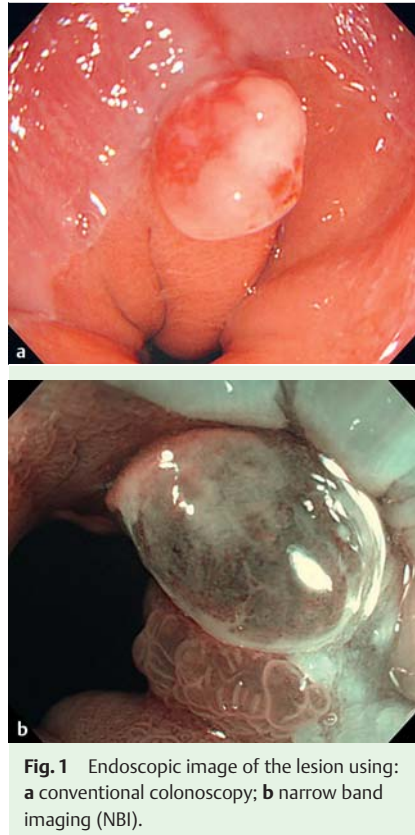


Fig. 1 Endoscopic image of the lesion using: **a** conventional colonoscopy; **b** narrow band imaging (NBI).

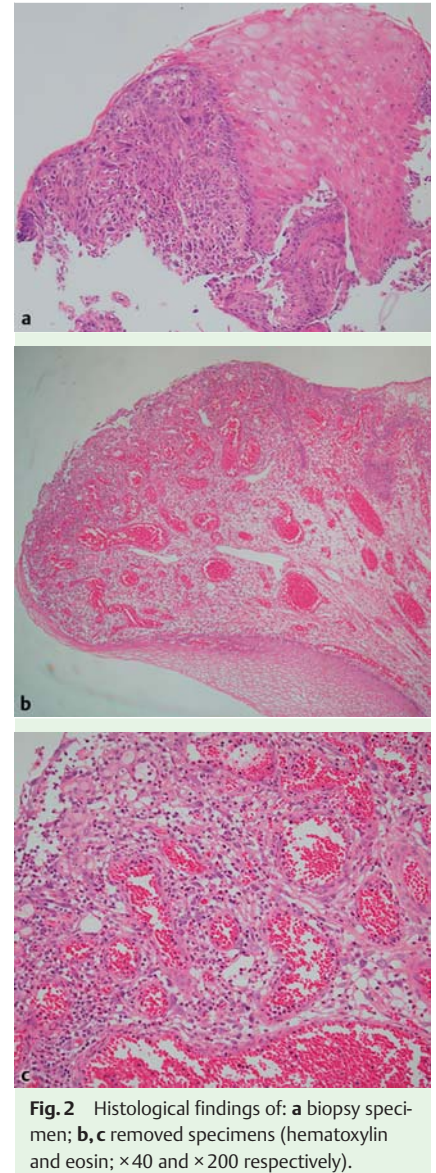


Fig. 2 Histological findings of: **a** biopsy specimen; **b, c** removed specimens (hematoxylin and eosin; ×40 and ×200 respectively).

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

Age	Gender	Location	Symptom	Endoscopic findings	Complication	Diagnosis at biopsy	Treatment	Reference
64	F	Esophagus	Dysphagia	Ulcer with stricture	ND	Carcinoma	Esophagectomy	Isaacson, 1982
52	F	Esophagus	Dyspepsia	Ulcer	ND	Suspicious for malignancy	Improved on treatment	Isaacson, 1982
75	F	ECJ	Epigastric pain	Necrotic lesion	Gastrectomy	Suspicious for malignancy	Polypectomy	Dirschmid, 1983
52	F	ECJ	Epigastric pain	ND	None	Suspicious for malignancy	Polypectomy	Dirschmid, 1983
57	M	ECJ	Epigastric pain	ND	Gastrectomy	Suspicious for malignancy	Polypectomy	Dirschmid, 1983
43	M	ECJ	Epigastric pain	ND	Gastrectomy	Suspicious for malignancy	Observation (repeated biopsies)	Dirschmid, 1983
59	M	ECJ	Melena	Polypoid mass with ulceration	None	Suspicious for squamous cell carcinoma	Segmental resection	Wolf, 1988
21	F	ECJ	Dysphagia	Stricture mass	None	ND	Esophagogastrectomy	Wolf, 1988
ND	ND	ECJ	ND	Polyp	ND	ND	Polypectomy or biopsy	Shekitka, 1990
ND	ND	ECJ	ND	Ulcer	ND	ND	Polypectomy or biopsy	Shekitka, 1990
ND	ND	ECJ	Epigastric pain	Polyp	ND	ND	Polypectomy or biopsy	Shekitka, 1990
ND	ND	ECJ	Epigastric pain	Polyp	ND	ND	Polypectomy or biopsy	Shekitka, 1990
ND	ND	ECJ	Epigastric pain	Polyp	ND	ND	Polypectomy or biopsy	Shekitka, 1990
ND	ND	ECJ	Epigastric pain	Polyp	ND	ND	segmental resection	Shekitka, 1990
73	F	Dysphagia	Small polypoid lesion with stalk	Small polypoid lesion with stalk	Reflux esophagitis	Suspicious for malignancy	Polypectomy	Ajiki, 1996
53	M	None	Polyp with patchy mucous exudate on surface and linear erosion at base	Polyp with patchy mucous exudate on surface and linear erosion at base	Reflux esophagitis	Bizarre cells	Polypectomy	Moriyama, 2003
70	M	Melena, anemia	Small polypoid lesion with ulceration and erosion	Small polypoid lesion with ulceration and erosion	Reflux esophagitis	Stromal atypia	Endoscopic mucosal resection	Honda, 2005
60	M	None	Small polyp with erosion and linear erosion at oral side	Small polyp with erosion and linear erosion at oral side	Reflux esophagitis	Suspicious for spindle cell sarcoma	Endoscopic submucosal dissection	Present case

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

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