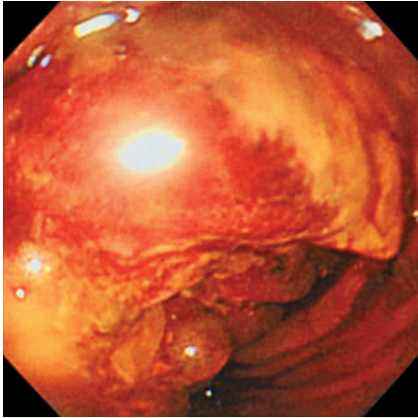
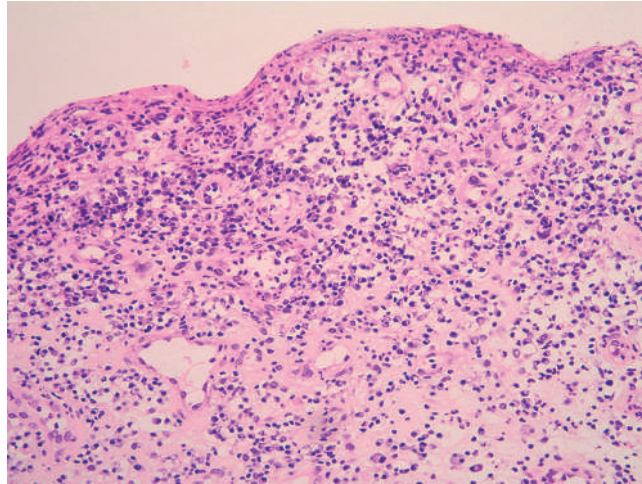


## Jejunal inflammatory granuloma: a complication of direct percutaneous endoscopic jejunostomy



**Figure 1** Transjejunal endoscopic view showing an irregular jejunal tumor on the wall opposite the jejunocutaneous fistula.



**Figure 2** Histological view of the tumor tissue, showing inflammatory granulation tissue infiltrated with neutrophils (hematoxylin and eosin stain, original magnification  $\times 100$ ).

A 75-year-old woman was referred to our hospital for follow-up treatment after an intracerebral bleed on 5 February 2002. We placed a percutaneous endoscopic gastrostomy (PEG) on 5 March 2002 for enteral feeding. She developed frequent vomiting of the nutrients administered through the PEG tube 26 months after PEG placement. We tried gastric motility stimulant drugs, but these were ineffective, and on 21 June 2004 we performed a direct percutaneous endoscopic jejunostomy (D-PEJ). A one-step button (Boston Scientific, Natick, Massachusetts, USA) was placed approximately 15 cm distal to the ligament of Treitz, according to methods described previously [1].

Seventeen months after the D-PEJ placement, she suddenly vomited gastric juices and the nutrients administered through the D-PEJ, and this was complicated by the development of aspiration pneumonia. A small-caliber endoscope (GIF XP-240; Olympus Optical Co. Ltd., Tokyo, Japan) was inserted through the jejunocutaneous tract, and we found a round, irregular-shaped tumor on the opposite wall of the fistula (● **Figure 1**). A biopsy specimen from the tumor revealed inflammatory granulation tissue infiltrated with neutrophils (● **Figure 2**).

Adverse events reported to be associated with D-PEJ to date are bleeding, colonic perforation, abdominal wall abscess, jejunal volvulus, aspiration, persistent enterocutaneous fistulas, peristomal leakage

and infection, and jejunal ulcer [2]. This is the first case report of intrajejunal granuloma formation after D-PEJ. Peristomal granulation occurs frequently after PEG. Intra-gastric pseudotumoral gastric mucosa or bumper-related polyps have also been reported previously [3, 4]. These tumors are thought to be caused by repeated stimulation of the gastric mucosa by the inner bumper after PEG. Histological examination of the tumors usually reveals hyperplasia of the foveolar epithelium of the gastric mucosa, but occasionally inflammatory granulation is found [4]. In this case, the top of the bumper was touching the opposite wall of the fistula and caused inflammation. Intrajejunal granuloma should be noted as a potential adverse effect of D-PEJ.

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