

Endoscopic submucosal dissection for anal intraepithelial neoplasia

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A 68-year-old woman was found to have a 20-mm superficial lesion at the dentate line (Fig. 1). Narrow band imaging (NBI) revealed a well-demarcated area with irregular intrapapillary capillary loops, similar to the findings seen in esophageal superficial squamous cell carcinoma [1]. Endoscopic biopsy revealed a high-grade squamous intraepithelial lesion (HSIL). After delineating the lesion under magnifying NBI, endoscopic submucosal dissection (ESD) was performed using an endo-surgical knife (Flushknife BT 1.5 mm, DK2618JB-15, Fujifilm, Tokyo, Japan). A transparent hood (D-201-12704, Olympus Medical Systems, Co. Ltd., Tokyo) was fitted on the tip of the colonoscope. For submucosal injection, 0.5% procaine hydrochloride was used in the anal canal and 0.4% sodium hyaluronate (Mucoup, Johnson & Johnson Medical Company, Tokyo, Japan) at the rectal side. The lesion was completely removed without any complication (Fig. 2). Histological findings of the resected specimen confirmed HSIL with clear resection margins. Immunohistochemical staining showed p16 protein expression, suggesting infection by the human papilloma virus (HPV). Two months later, the patient was asymptomatic and repeat endoscopy showed a well-healed scar.

Anal intraepithelial neoplasia (AIN) is a precursor of invasive anal cancer. Although low-grade AIN can be followed up conservatively, HSIL is recommended to be treated [2]. The traditional treatment for HSIL has been local surgical excision with mapping biopsy, though in some cases local recurrence and complications, i.e. anal stenosis or fecal incontinence, may occur [3]. In this case, magnifying NBI contributed accurately to the diagnosis of AIN, and ESD enabled complete removal of the lesion.

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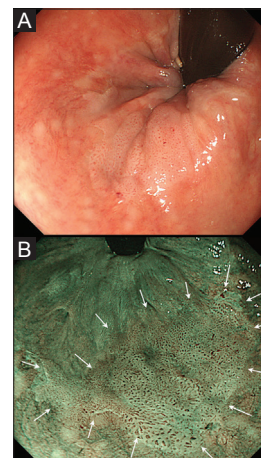


Figure 1 (A) A whitish superficial lesion was found on the dental line. (B) Narrow band imaging revealed a demarcated area (white arrows) with small brownish dots in the lower rectum

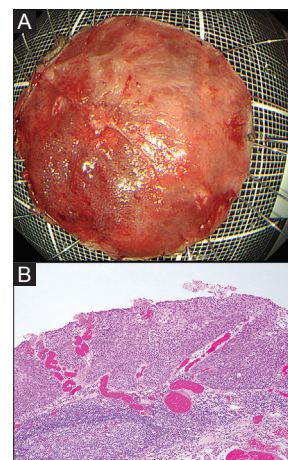


Figure 2 (A) Resected specimen after endoscopic submucosal dissection. (B) Histological findings showed a high-grade squamous intraepithelial lesion

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