Narrow-band imaging for diagnosis of squamous cell carcinoma in the anal canal

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A 61-year-old man with a history of rectal bleeding and hemorrhoids underwent colonoscopy and a 15 mm large flat lesion with scattered reddish spots was detected in the anal canal at the dentate line (Fig. 1A). Narrow-band imaging showed dilated, tortuous, and irregular microvessels with intraepithelial papillary capillary loop patterns (Fig. 1B), similar to squamous cell carcinoma of the esophagus [1,2]. The lesion was treated by underwater endoscopic mucosal resection without submucosal injection. The polyp was completely immersed in water, the lumen was deflated (Fig. 1C), and a polypectomy snare (13 mm, Captivator™, Boston Scientific) was used to resect it in two pieces with a piecemeal technique. The lesion was completely removed without any bleeding or signs of perforation (Fig. 1D). The patient went home the same day and experienced no complication. Pathology showed a poorly differentiated squamous cell carcinoma (Fig. 2) with positive staining for P16, a marker of human papilloma virus infection, and Ki-67, but the level of invasion was uncertain and the patient was referred for chemoradiotherapy.

Squamous cell carcinoma of the anal canal is a rare cancer in the gastrointestinal system [3] and can easily be overlooked during colonoscopy. This unusual case shows that digital chromoendoscopy using narrow-band imaging can be useful to help identify anal squamous cell carcinoma.

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Figure 1 (A) Endoscopic view of a 15-mm large lesion in the anal canal at the dentate line. (B) Narrow-band imaging reveals a microvascular pattern of dilated, tortuous, and irregular capillaries with intraepithelial papillary vascular loops. (C) The lesion was treated by underwater endoscopic mucosal resection. (D) The polyp was completely removed by piecemeal resection

Figure 2 Microscopic image showing poorly differentiated squamous cell carcinoma

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