

Narrowband imaging colonoscopy with a transparent hood for diagnosis of a squamous cell carcinoma in situ in the anal canal

Anal cancer is a relatively rare malignancy [1]. An analysis of the National Cancer Data Base showed that most patients with anal carcinoma (71.1%) required invasive treatments such as chemoradiation therapy with or without surgery, and the 5-year overall survival for these patients was 58.0% [2]. Anal squamous cell carcinoma in situ (CIS) accounts for almost 10% of all anal carcinomas [3]. Here we present a case of anal canal squamous cell CIS incidentally detected in a patient at low risk of developing anal cancer. The presence, histology, and spread and depth invasion of the tumor were correctly diagnosed by narrowband imaging (NBI) with magnification.

An asymptomatic 62-year-old woman underwent conventional colonoscopy, which revealed an ill-defined, flat lesion with scattered reddish spots at the dentate line (● Fig. 1).

NBI without magnification showed a well-demarcated brownish area, 25 mm in size, as well as scattered brown dots at the same site (● Fig. 2a).

NBI with magnification disclosed dilated and tortuous capillaries, mimicking intraepithelial papillary capillary loops in the esophagus (● Fig. 2b,c).

Lugol chromoendoscopy revealed a well-demarcated, unstained area corresponding to the brownish area seen with NBI (● Fig. 3).

A biopsy specimen was taken for histological evaluation, which suggested squamous cell carcinoma, and transanal resection was carried out. On histological ex-

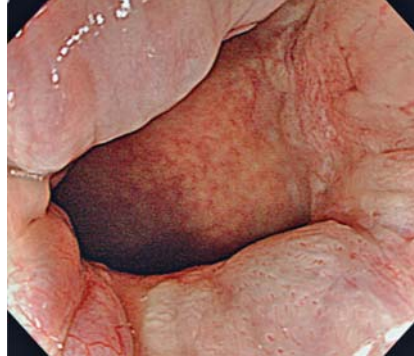


Fig. 1 Colonoscopy with a transparent hood showing an ill-defined, flat lesion, slightly reddish at the dentate line.

amination, the resected specimen showed squamous cell CIS with high grade intraepithelial neoplasia (● Fig. 4); the surgical margin was free of tumor.

To the best of our knowledge, this is the first report of an anal CIS detected by NBI. NBI with magnifying endoscopy showed an abnormal vascular pattern of intraepithelial papillary capillary looping, which suggested that the lesion was a squamous cell cancer [4]. The spread of this tumor was also clearly demarcated with NBI. In the present case, we used a magnifying colonoscope with a transparent hood [5]. A transparent hood also ensures good visualization of the anal canal without retroflexion of the colonoscope. Therefore, NBI colonoscopy with a transparent hood is useful for screening for anal squamous cell carcinoma.

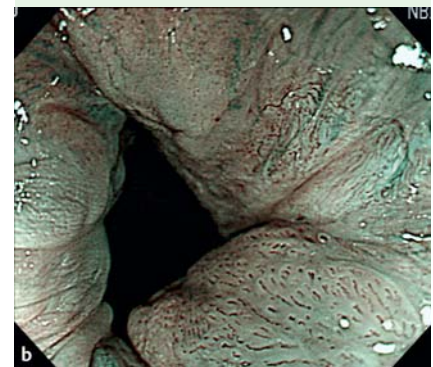
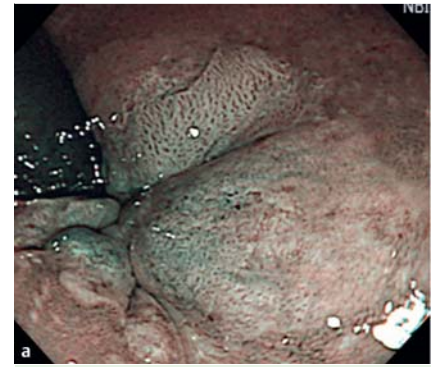


Fig. 2 a Narrowband imaging (NBI) without magnification showing a well-demarcated, brownish area, 25 mm in size, and scattered brown dots at the same site. b, c NBI with magnification showing dilated and tortuous capillaries mimicking intraepithelial papillary capillary loops in the esophagus.

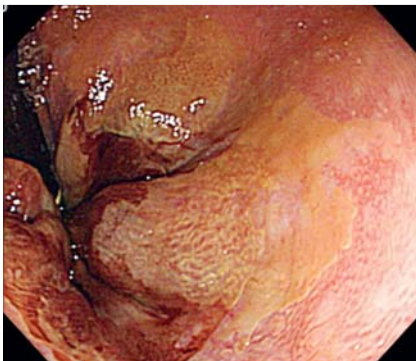


Fig. 3 Lugol chromoendoscopy showing a well-demarcated, unstained area corresponding to the brownish area shown by narrowband imaging.

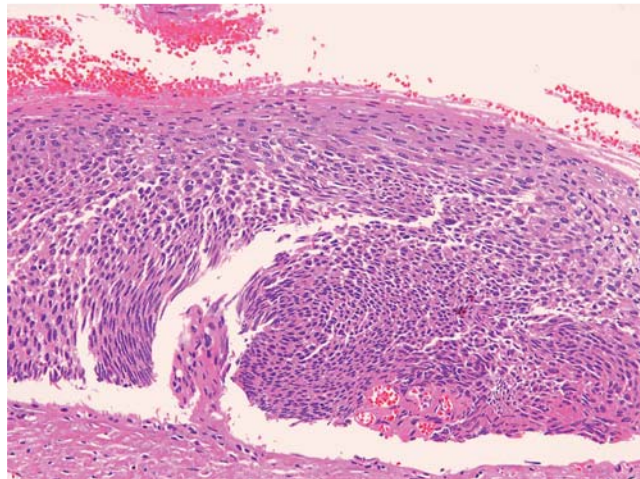


Fig. 4 The resected specimen was a squamous cell carcinoma in situ with high grade intraepithelial neoplasia.

Competing interests: None

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