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CASE 1

A 54-year-old woman underwent a colorectal cancer screening. Her fecal immunochemical test was positive. Colonoscopy was performed and revealed a 0.7 cm sessile polyp whitish exudate covered on the hyperemic smooth surface mucosa at the descending colon (Figure 1 and 2). Narrow band imaging (NBI) showed a dark color surface polyp with round pit pattern surrounded by normal capillary vessels (Figure 3 and 4).

Polypectomy was performed. Histological diagnosis was an inflammatory polyp.

Diagnosis:

Colonic inflammatory polyp

Discussion:

Inflammatory polyp of the colon is a result of mucosal inflammation and regeneration with healing process after inflammation or ulceration. The etiology of inflammatory polyps may be classified into two group; pseudopolyps and prolapse-induced inflammatory polyp⁽¹⁾. Pseudopolyps are the most common cause of inflammatory polyps and associated with inflammatory bowel disease (IBD) which can be found about 10-20% of the patients⁽²⁾. Inflammatory polyps may also develop after severe colitis from any causes⁽³⁾.

Endoscopic appearances are vary; a sessile or pedunculated, single or multiple, smooth with hyperemic mucosa with/without exudation, or erosion on the sur-

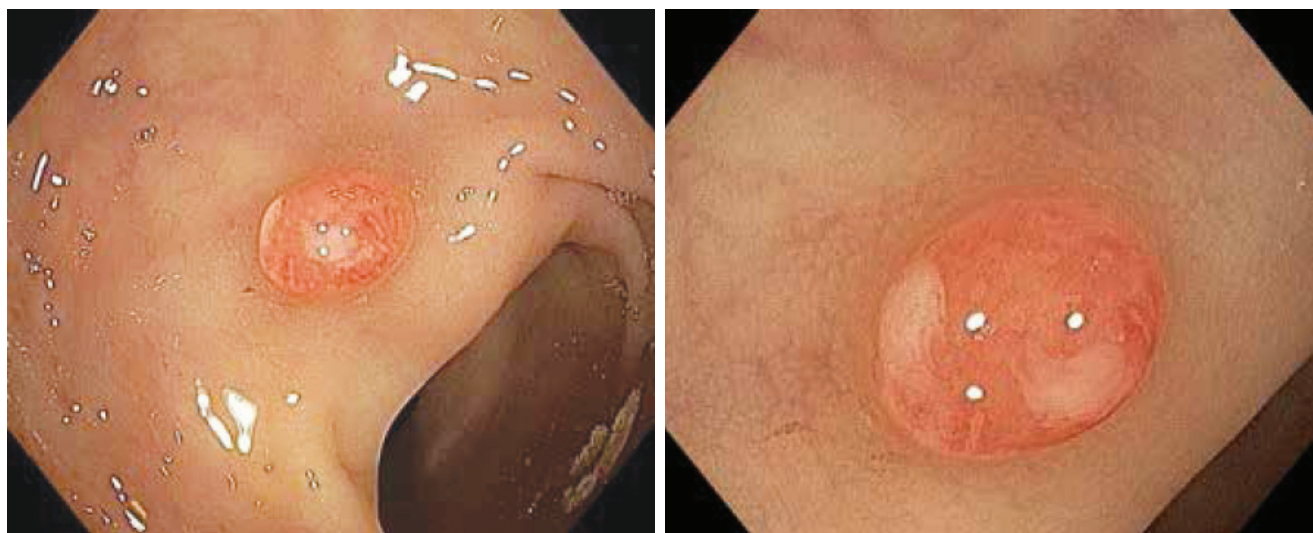


Figure 1 and 2. White light colonoscopy showed a sessile polyp with hyperemia smooth surface covered by whitish exudate.



Figure 3 and 4. Narrow band imaging (NBI) with magnification revealed a uniform dark color surface polyp with normal capillary pattern and some area of the polyp contained whitish exudate.

face of polyps.

Inflammatory polyps do not significantly increase the risk for dysplasia or carcinoma⁽⁴⁾.

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CASE 2

A 48-year-old man with a family history of colorectal cancer underwent a colonoscopy screening. White light image (Figure 1) showed a 1.2 cm semi-pedunculated polyp (Paris classification Isp) at the sigmoid colon. Under magnifying NBI (dual focus) the pits were confirmed as villous pattern and surrounded by the thick, high density with tortuous brown vessels (Sano's classification type IIIa). It was compatible with NICE classification type 2 (Figure 2). Polyp removal was done (Figure 3). Pathology confirmed as a villous adenoma.

Diagnosis:

Villous adenoma



Figure 1. White light image of a semi-pedunculated polyp (Isp).

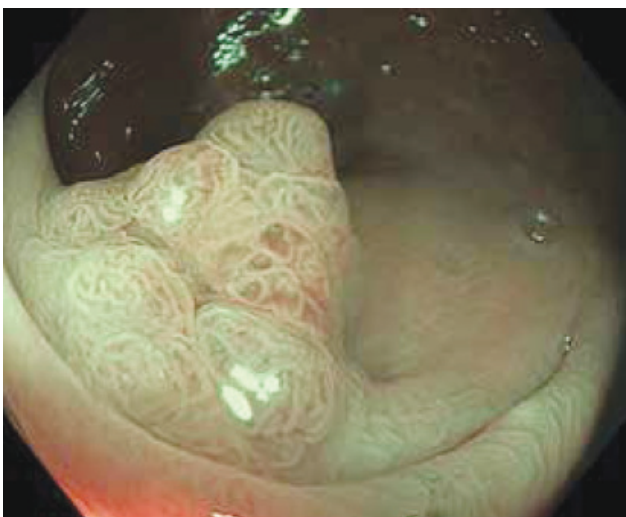


Figure 2. Narrow band image of villous adenoma.

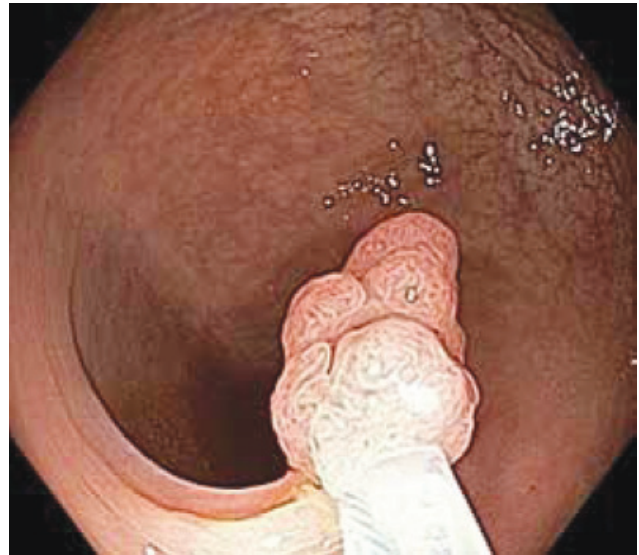


Figure 3. Snare polypectomy

Discussion:

Colorectal cancer (CRC) is a major cause of death worldwide. Magnified colonoscopy is a useful diagnostic tool for a real-time evaluation of many polypoid lesions. Under magnifying NBI, microvascular architecture and surface pits pattern are clearly demonstrated. Its role is also for the assessment of the depth of invasion in early CRC without the need for dye spraying^(1,2). Villous adenoma can be showed as type IIIa in Sano's classification and type 2 in NICE classification. According the ESGE guideline, patients with villous adenoma was classified as a high risk group⁽³⁾. The surveillance colonoscopy at 3 years after polypectomy is recommended⁽³⁾.

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CASE 3

A 62-year-old Thai female underwent colonoscopy for a colorectal cancer screening. Colonoscopy showed a sessile polyp sized 0.5 cm at the descending colon. NBI showed vascular pattern with high density of capillary vessels (Sano's classification type IIIa). Pit pattern showed branch-like pit (Kudo's classification type IV). Based on the NICE

classification, its color was browner relative to the background and its vessels were thick brown. Surface pattern showed branch white structure surrounded by brown vessels. Therefore it was compatible with NICE classification type II (Figure 1). Polypectomy was performed. Histopathology revealed a tubular adenoma with high grade dysplasia.

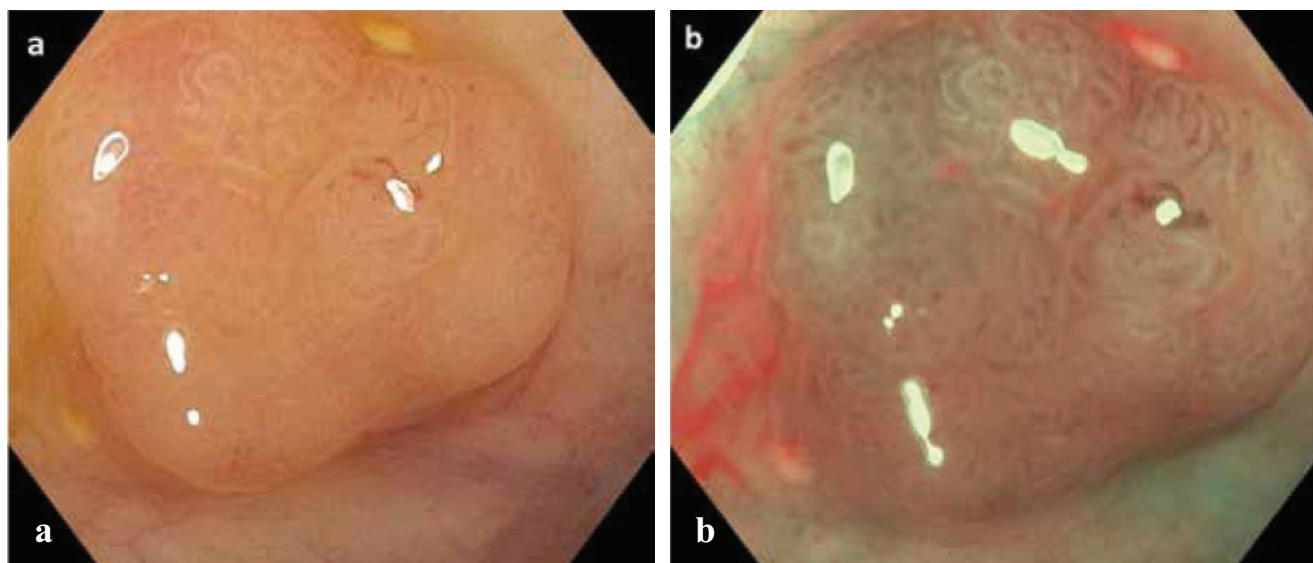


Figure 1. White light imaging (a) showed a sessile polyp with branch-like pit pattern and high density vascular pattern under NBI (b).

Diagnosis:

Tubular adenoma with high grade dysplasia.

Discussion:

Technically, NBI can enhance the visualization of mucosal surface structure and vascular pattern and help for identifying colonic neoplasia⁽¹⁾. Several studies supported the effectiveness in differential diagnoses of colorectal polyps⁽¹⁾. NBI international colorectal endoscopic (NICE) classification system is a simple categorical classification (types 1-3) based on 3 parameters: (i) lesion color; (ii) microvascular

architecture; and (iii) surface pattern⁽²⁾. Most likely pathology in NICE type II is adenoma⁽²⁾. In this case, based on the NICE classification, NBI read as type II that compatible with adenoma that later confirmed by pathology.

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CASE 4

An asymptomatic 62-year-old male underwent a colonoscopy for colorectal cancer screening. A colonoscopy showed a 0.5 cm sessile polyp at the appendiceal orifice. Under NBI exam, it showed uniform round pit central with central dark dots (type I Sano's classification) which was compatible with type 1 NICE classification. Snare polypectomy was successfully done without complication. Pathology confirmed as a hyperplastic polyp.

Diagnosis:

Hyperplastic polyp at the appendiceal orifice

Discussion:

Hyperplastic polyps are found more common than

adenomas. They are usually small and located in the left sided colon without potential for malignancy⁽¹⁾. NBI international colorectal endoscopic (NICE) classification can be used as a diagnostic tool to predict histology⁽²⁻⁴⁾. The evaluation of both the vascular pattern and surface pattern are important. However a polypoid inverted appendiceal orifice can mimic a true polyp⁽⁵⁾, but it can easily differentiate from a polyp by using NBI which usually show normal appearing mucosa. Although there was no risk for malignancy in this case, the polyp was removed due to the worry of potential risk for polyp occluding the appendiceal orifice.

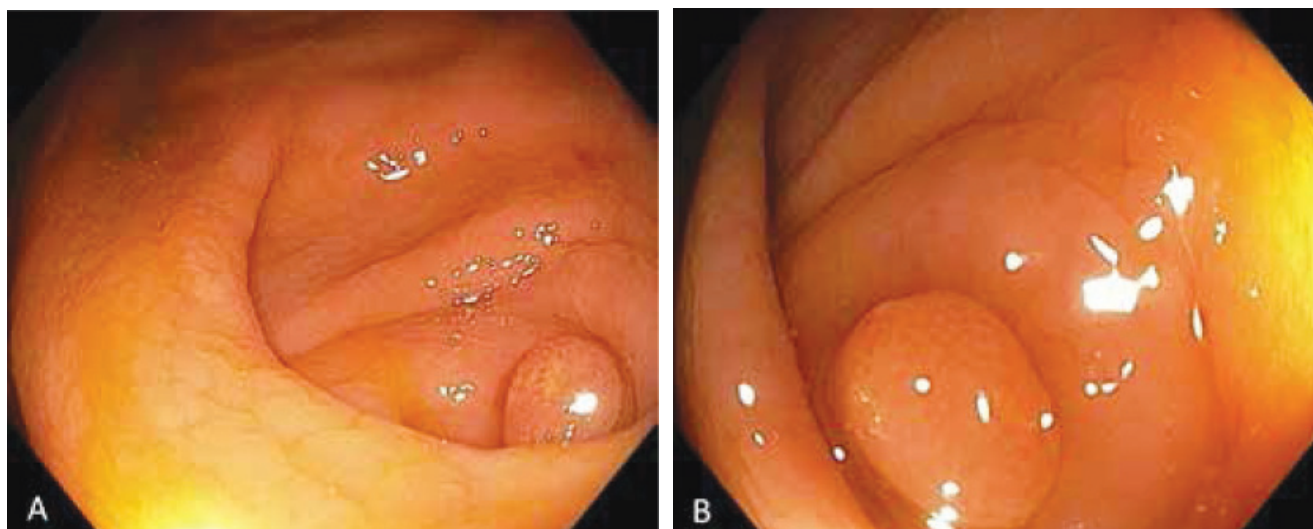


Figure 1. White light image (A, B) of a 0.5 cm sessile colonic polyp at the appendiceal orifice.

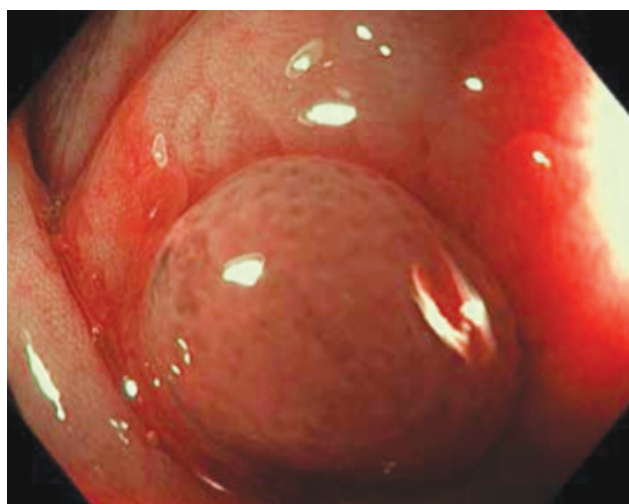


Figure 2. NBI image of type 1 NICE classification.

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