Multiple granular cell tumor of the colon

A 44-year-old man was referred to our endoscopy unit because of a family history of colorectal neoplasia. Colonoscopy revealed numerous semi-pedunculated polyps with intact mucosa, measuring 6 – 12 mm, in the cecum (n = 2), ascending (n = 5), and transverse (n = 2) colon. The two largest polyps, measuring 8 mm and 12 mm, respectively, and occurring in the ascending colon (**Fig. 1**), were removed by snare polypectomy. Histologic examination of the polyps revealed a submucosal tumor composed of cells with small round nuclei and abundant granular eosinophilic cytoplasm (**Fig. 2**). Immunohistochemical analysis showed the tumor cells expressed S-100 protein (**Fig. 3**). The resected polyps were diagnosed as granular cell tumor (GCT). Upper endoscopy, enteroscopy by videocapsule, and abdominal computed tomography scan were unremarkable. The patient entered an annual endoscopic follow-up program.

GCT is a rare tumor that may occur in any site of the body [1,2]. It commonly occurs in the oral cavity, the skin, and the subcutaneous tissue, and is seldom found in the gastrointestinal tract [1,2]. In the gastrointestinal tract, the most common site is the esophagus, followed by the large intestine [1,2]. Gastrointestinal GCT is usually found incidentally during endoscopy as a submucosal tumor and is multiple in 10% – 20% of all cases (15 patients described in the literature) [2].

The final diagnosis of GCT depends on pathologic findings: cells with small, uniform nuclei and abundant granular eosinophilic cytoplasm containing acidophilic, periodic acid-Schiff (PAS)-positive, diastase-resistant granules, and expression of S-100 protein or neuron-specific enolase [1,2].

GCT is usually clinically and histologically benign, with only a few malignant GCT cases reported [1,2]. Malignant behavior is suggested by large size (> 4 cm), rapid growth, and invasion of the adjacent tissues rather than the histologic features [1,2]. As gastrointestinal GCTs are considered benign, a conservative approach is suggested by means of endoscopic resection and a strict endoscopic follow-up [2].

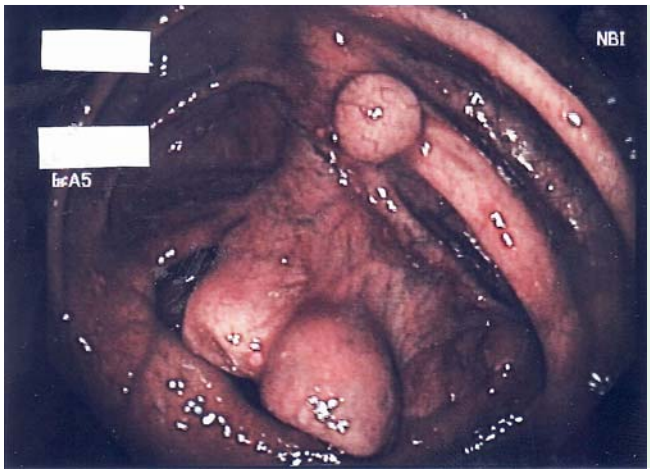

Fig. 1 Narrow-band imaging showed three semi-pedunculated polyps covered by normal mucosa in the ascending colon.

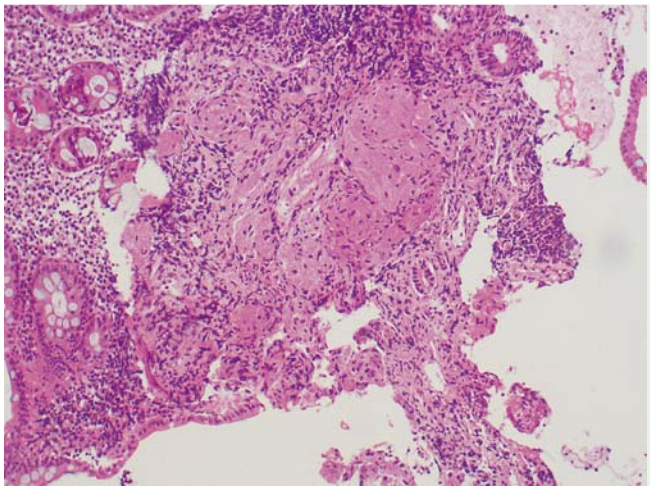

Fig. 2 Histologic examination of the polypectomy specimen showed a submucosal tumor composed of cells with abundant granular cytoplasm. (Hematoxylin and eosin, × 50).

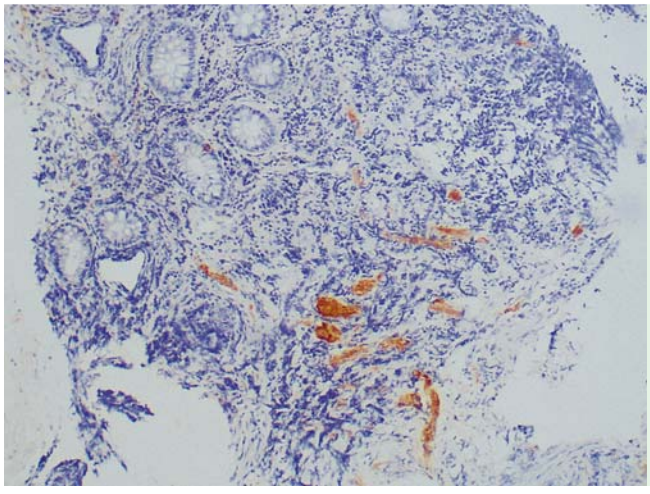

Fig. 3 Immunohistochemical examination for S-100 protein revealed diffuse and strong expression of S-100 protein in tumor cells (× 50).

Competing interests: None

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Bibliography

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