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). Immuno-histochemical 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].

Competing interests: None
Multiple granular cell tumor of the colon: report of a case and review of the literature.