Multiple Synchronous Granular Cell Tumors (Abrikossoff Tumors) of the Caecum and Ascending Colon: Case Report and Review of the Literature

Belfontali V, Shiltz B, Buchs NC, Bischoff L, Morel P, Ris F

BACKGROUND
Granular Cell Tumors (GCTs) or Abrikossoff Tumors are rare, usually benign soft tissue tumors.

CASE REPORT
A 52-year-old man was diagnosed with multiple submucosal lesions located in the caecum and proximal ascending colon during a screening colonoscopy (Fig.1). CT-scan showed one of the lesions near the Bauhin’s valve (Fig.2), and no distant suspect lesions. An endoscopic resection of the biggest tumor was attempted but was unfortunately incomplete (Fig.3). Histological analysis showed characteristics in favor of GCTs. Because of the presence of multiple lesions, and the increased risk of malignant transformation reported in literature for big lesions, a right colectomy was performed. The final histological analysis showed 7 benign GCTs (Fig.4) and 20 lymph nodes free of disease.

DISCUSSION
Colorectal GCTs are usually asymptomatic, small and solitary, submucosal tumors, covered by intact colonic mucosa. Nonetheless, they can be multiple in 10 to 20% of the cases, as in our patient. Histological diagnosis needs deep biopsies and shows round cells with eosinophilic cytoplasm and small uniform nuclei. Neural markers including S-100 protein are expressed uniformly (Fig.5), and suggest their origin from Schwann cells. Endoscopic submucosal resection of colorectal GCTs is curative in most cases, but local recurrence has been reported. Malignant GCTs have been described but are rare, representing only 1 to 2% of all GCTs. The risk of malignancy seems to appear when lesions grow up over 40mm in diameter.

In conclusion, colorectal GCTs are rare tumors, but they have to be considered in differential diagnosis when encountering a submucosal lesion during a screening colonoscopy. The final diagnosis depends on pathological findings.