Granular cell tumour. Case report.

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ABSTRACT

Introduction: Granular cell tumour (GCT), also called an Abrikossoff tumour, is a relatively rare neoplasm that usually develops between the fourth and sixth decades of life, with a slightly higher prevalence among female patients. Most GCTs are asymptomatic and are usually reported as incidental findings from endoscopy. Histologically, GCTs are composed of large polygonal cells containing numerous eosinophilic granules.

Case presentation: A 65-year-old woman without any symptoms was admitted for a preventative colonoscopy. The biopsy revealed sessile serrated adenomas (adenomatous polyps) with low-grade dysplasia. The lesion in the caecum showed an intestinal mucosa with a subepithelial tumour, which was found to be positive for S-100 protein and could correspond to Abrikossoff’s tumour.

Conclusions: Due to the rare occurrence of colorectal Abrikossoff tumours in the colon, there are very few reported cases, especially in male patients. A colorectal GCT is a sporadic submucosal tumour that usually follows a benign course. Malignant GCT is extremely rare. The final diagnosis of GCT can be based on endoscopic biopsy and histopathological examinations. The basis of benign GCT treatment is endoscopic resection, which often leads to a cure.

Keywords: GCT, granular cell tumour, Abrikossoff’s tumour

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INTRODUCTION

Granular cell tumour (GCT), also called an Abrikossoff tumour, is a relatively rare neoplasm that usually develops between the fourth and sixth decades of life, with a slightly higher prevalence among female patients [1]. It commonly occurs in the skin or soft tissues but is also occasionally found in the gastrointestinal tract. Approximately 10% of GCTs develop in the gastrointestinal tract, most commonly in the oesophagus and less in the rectum [2,3,4]. Most GCTs are asymptomatic and are usually reported as incidental findings from endoscopy [5]. Histologically, GCTs are composed of large polygonal cells containing numerous eosinophilic granules. Immunohistochemical staining for an S-100 protein suggests GCTs are derived from Schwann cells [6].

CASE REPORT

A 65-year-old woman without any symptoms was admitted for a preventative colonoscopy. The colonoscopy detected a 5mm, yellowish, submucosal lesion in the caecum; 7mm, 5mm, and 4mm polyps in the bottom of the caecum; and a 4mm polyp in hepatic flexure. All polyps were removed with cold snare polypectomy. The sigmoid colon presented diverticulums with a diameter of up to 4mm.

The biopsy revealed sessile serrated adenomas (adenomatous polyps) with low-grade dysplasia. The lesion in the caecum showed an intestinal mucosa with a subepithelial tumour, which was found to be positive for S-100 protein and could correspond to Abrikossoff’s tumour.

Figure 1. Histological section of Abricossoff H7E (x40)

Figure 2. Expression of S100 (x40)
The patient was booked for a follow-up endoscopy appointment after a year.

DISCUSSION

Due to the rare occurrence of colorectal Abrikossoff tumours in the colon, there are very few reported cases, especially in male patients. A colorectal GCT is a sporadic submucosal tumour that usually follows a benign course. Malignant GCT is extremely rare; the literature indicates they are as few as 1–2% of all GCTs. A colorectal GCT usually occurs within the submucosa with an intact mucosa surface [7].

The tumour usually presents as a sessile, yellow-greyish polyp with a firm consistency [8]. It is detected accidentally during screening endoscopy. The final diagnosis of GCT can be based on endoscopic biopsy and histopathological examinations. The basis of benign GCT treatment is endoscopic resection, which often leads to a cure [3]. Recurrence is highly uncommon after curable GCT resection. However, if the tumour is not removed entirely, the relapse rate is between 15% and 50% [9].

Despite this relatively low relapse risk, long-term follow-up will be necessary to detect any recurrence or malignant transformation of the GCT.

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Conflicts of interest

The authors have declared no conflict of interest

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