Granular cell tumor of colon: a case report

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INTRODUCTION

Granular cell tumor, also known as granular cell myoblastoma¹, is a rare soft tissue tumor that affects any anatomical site, more commonly the oral cavity and tongue (33%), subcutaneous tissues (10%) and the musculoskeletal system (5%)². In the gastrointestinal tract, it affects most commonly the esophagus, followed by the stomach and duodenum². Its histogenesis is uncertain³; however, it is known to be a benign tumor that appears as a submucosal nodule, and which may be accidentally found during the endoscopic exam⁴.

We report the case of a patient with granular cell tumor, diagnosed and treated by endoscopy, with good progress after 24-month follow-up.

CASE REPORT

A 42-year-old man came to the outpatient clinic complaining of rectal prolapse, bleeding and pain at evacuation. At the physical examination, mixed hemorrhoids were observed, with no additional findings. In the preoperative period, laboratorial exams were performed and the patient was submitted to colonoscopy.

This examination showed the presence of three submucosal lesions in the cecum and ascending colon, which were resected after infiltration of the submucosa with saline solution, with no complication during the procedure. Macroscopically, the lesions presented around 5 mm diameter, were hardened and whitish. The material was sent for histopathological analysis, which showed lesions compatible with granular cell
tumor, presenting dystrophic calcifications (Figure 1). The lesions were removed by endoscopic excision, with observational management. After 24-month follow-up, the patient remains asymptomatic and with normal colonoscopy.

![Figure 1. Histological exam showing dystrophic calcifications, compatible with the presence of granular cell tumor.](image)

**DISCUSSION**

Granular cell tumor rarely affects the gastrointestinal tract. The cellular origin of this entity is uncertain. In the beginning, it was believed to have a myoblastic origin, and for this reason, it was named granular cell myoblastoma. However, as it is positive to S-100 protein, it is thought to be a tumor of neural origin, more precisely, of Schwann cells. The incidence of this neoplasm has not been defined, but it is supposed to affect more often men in his 40s or 50s.

When affecting the gastrointestinal tract, this tumor is usually located in the submucosa, covered by normal mucosa. The tumor diameter varies from 1 to 2 cm, but tumors of 4 cm diameter have been reported, and it may be a single tumor or multiple tumors.

The tumor symptoms are unspecific. In most cases, the lesions are asymptomatic; and they may simulate other pathologies that affect the colon, such as hematochezia and abdominal discomfort. At colonoscopy, the aspect is similar to that of a sessile polyp, preferably located in the anorectal area and the ascending colon. The endoscopic biopsy is not the best option, as in most cases, the tumor is covered by normal mucosa. The endoscopic ultrasound may suggest the diagnosis, but it does not always allow it to be distinguished from malign neoplasms. The best diagnostic option is the mass surgical excision and histopathological analysis.

Diagnosis is rarely difficult at the histopathological analysis, as the presence of nests of large cells with abundant cytoplasm and small and round nucleus is typical. The immunohistochemical analysis confirms the diagnosis when demonstrating positivity to S-100 protein, neuron specific enolase and vimentin, and negativity to alpha smooth muscle actin and desmin.

As this is a benign pathology, the recommended treatment is the endoscopic excision of the lesion by extensive biopsy when the tumor diameter is smaller than 2 cm and not adherent to the muscularis propria, preventing complications such as perforation and bleeding. In cases of multiple tumors, total colostomy is recommended. For single location of the tumor, but with diameter above 4 cm, colectomy is suggested, as tumors of this size present higher risk of malignity and metastasis.

**CONCLUSION**

This report described a case of granular cell tumors in the ascending colon and cecum. The patient presented unspecific symptoms, which is typical of this pathology, and the disease was accidentally diagnosed during colonoscopy. The endoscopic excision is the recommended treatment and was successfully performed in the patient, with good clinical progress after 24-month follow-up.

**REFERENCES**


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