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Case Report

Granular cell tumor of anal border

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ABSTRACT

The objective of this report is to describe a case of granular cell tumor of the anal border and to review the most relevant topics of the literature on the subject. Ours is a female patient, 57 years old, with an asymptomatic nodule in the anal border for 2 years. Surgical excision was performed, with a histopathological diagnosis of granular cell tumor. The first description of this tumor was carried out in 1926 by Abrikossoff. The techniques of immunohistochemistry and electron microscopy allowed us to determine its origin in Schwann cells. These are rare tumors, most often diagnosed between the 4th and 6th decade of life and, in general, are benign formations – only 2% of them are malignant. These tumors can occur in any part of the body, although they are more common in the oral mucosa, dermis and subcutaneous tissue. The treatment solely by surgery has a curative effect, and its recurrence is unusual. The location in the anal/perianal area occurs even more rarely, and we found only 48 cases previously described in the literature.

Tumor de células granulares de borda anal

Palavras-chave:
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Tumor de células granulares
Neoplasias
Relatos de casos

RESUMO

O objetivo deste relato é descrever um caso de tumor de células granulares de borda anal e revisar os tópicos mais relevantes da literatura acerca do tema. Trata-se de uma paciente do sexo feminino, 57 anos, com histórico de nódulo na borda anal assintomático há 2 anos. Foi realizada ressecção cirúrgica da lesão, com diagnóstico histopatológico de tumor de células granulares. A primeira descrição deste tumor foi em 1926 por Abrikossoff. As técnicas de imunohistoquímica e de microscopia eletrônica permitiram determinar a sua origem nas células de Schwann. São tumores raros, mais frequentes entre a 4ª e 6ª década de vida e, no geral, benignos, apenas 2% são malignos. Podem ocorrer em qualquer parte do corpo, embora sejam mais comuns na mucosa bucal, derme e tecido celular

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subcutâneo. O tratamento cirúrgico isolado é curativo e a recorrência incomum. A localização no ânus/canal anal/perianal é ainda mais rara, sendo encontrados apenas 48 casos previamente descritos na literatura.

Introduction

The first histopathological description of the granular cell tumor was performed in 1926 by Abrikossof. These are rare tumors, predominantly benign. The occurrence of malignant granular cell tumors barely reaches 2%, requiring observation of histological features of malignancy and evidence of metastases for its diagnosis.[1,2]

These tumors can show a wide distribution throughout the body, although the most affected areas are the buccal mucosa, dermis and subcutaneous tissue. Granular cell tumors are more frequent between the 4th and 6th decade of life.[3] In most case series, the tumor prevails among males, ranging from 64.5% to 68%.[2,4] Isolated surgical treatment is curative and its recurrence is unusual and as a general rule occurs in the same local, being associated with an incomplete resection of the primary lesion.[2–4]

Here we report the case of a granular cell tumor of the anal margin and discuss the most relevant aspects of literature and those presented by this case.

Case report

Female patient, 57 years old, African descent, teacher, married. A previously healthy patient without clinical and surgical comorbidities and no relevant family history; complained of an asymptomatic nodule located in the anal margin for about two years. She denied changes in her bowel habits and in characteristics of evacuations. On examination, a hardened perianal formation measuring about 2 cm, in the 5.00 o'clock position, was observed.

Surgical excision was indicated. Preoperative evaluation with colonoscopy, chest X-ray and laboratory tests found no abnormalities. Thus, the entire macroscopic lesion was resected at surgery.

In the macroscopic pathology, two surgical fragments of mucosa, with 3.2 cm × 1.3 cm × 1.6 cm and 1.3 cm × 0.7 cm × 0.4 cm, respectively, were evaluated together. The microscopy revealed an anal mucosa lined by stratified squamous epithelium without atypia, displaying typical irregular acanthosis features in the epithelium adjacent to the tumor. In the corium, we found cell proliferation with a large and granular cytoplasm, with regular nuclei, forming small groups amid intense fibrosis (Figs. 1 and 2). There was no necrosis or significant mitotic activity. The process was compromising the adjacent adipose tissue and skeletal muscle, in addition to lateral and deep surgical margins. The immunohistochemistry was positive in the neoplastic cells to S100, CD 68 (Figs. 3 and 4), neural specific enolase, inhibin and calretinin; and negative for pan-cytokeratin (AE1 and AE3).

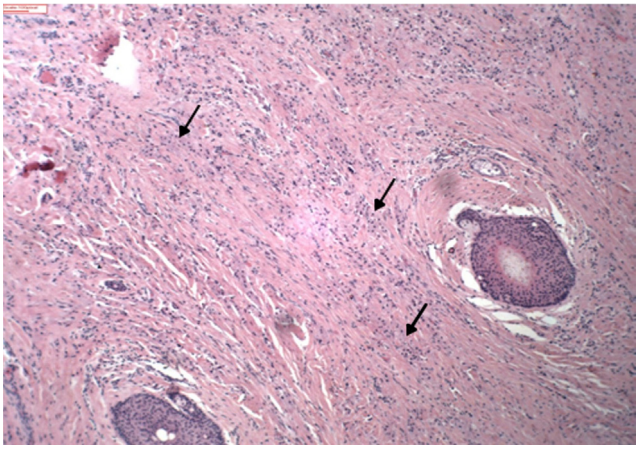

Fig. 1 – Tumor cells, low magnification, hematoxylin-eosin staining (40×).

Imaging studies (abdominal computed tomography and magnetic resonance imaging of the pelvis) carried out after surgery showed only postoperative changes in the anal area.

Discussion

Virtually, granular cell tumors can occur in any anatomical location, and although more cases are located in the skin and subcutaneous tissue, the tongue is singly the most common site. In 5–8.5% of the cases, the tumors are multiple. Rarely these formations are diagnosed before the surgical excision or when obtaining a biopsy of suspicious lesions.[2,4,5]

The presence of this tumor in the gastrointestinal tract varies from 5% to 19%.[2,4] Among the tumors of the perianal

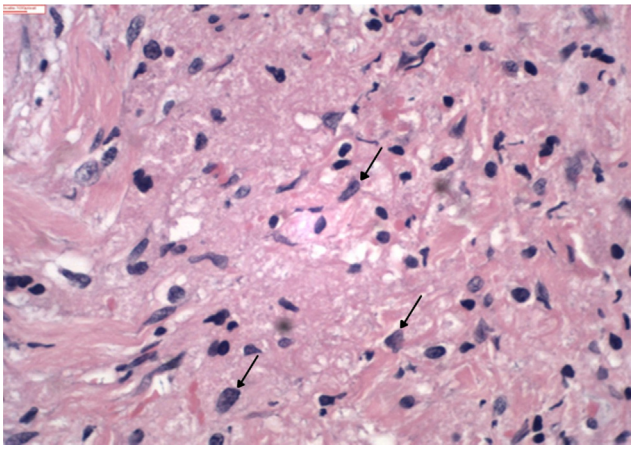

Fig. 2 – Tumor cells, large magnification, hematoxylin-eosin staining (400×).