



Case Report

A Rare Case of Granular Cell Tumor of the Anal Region: Diagnostic Difficulty to Masses in the Anal Area

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Granular cell tumor may be located anywhere in the body; however, the gastrointestinal tract is infrequently involved and anal granular cell tumors are extremely rare. We report herein a rare case of granular cell tumor in the anal region. In the current case, a 66-year-old Japanese woman was found to have a polypoid lesion in the anus with hemorrhoids. The mass detected as an anal polypoid lesion with ulceration was resected and diagnosed as granular cell tumor by histologic examination. Granular cell tumor of the anal region is rare, and benign perianal polypoid lesions are relatively uncommon clinical findings. They might present diagnostic challenges to surgeons and pathologists. Awareness of the differential diagnosis of granular cell tumor and careful microscopic examination might allow proper management and diagnosis.

Key words: Granular cell tumor – Anal – Polypoid mass

Granular cell tumor is a relatively rare neoplasm that is firmly identified as a neural lesion due to its close association with nerves and its immunohistochemical characteristics.^{1–5} Granular cell tumors may be located anywhere in the body; however, the gastrointestinal tract is infrequently involved and anal granular cell tumors are extremely rare.^{3–8} We report herein a rare case of granular cell tumor in the anal region. The concern with anal tumor is differential diagnosis, since benign mesen-

chymal anal tumors are relatively rare.^{7,8} Thus, an anal polypoid lesion might present diagnostic challenges to surgeons and pathologists.

Case Report

A 66-year-old Japanese woman was found to have a polypoid lesion in the anus. She had been suffering from hemorrhoids for more than 40 years. She was admitted to our hospital with a complaint of anal

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Fig. 1 The anal polypoid mass with ulceration in the anus at the 6 o'clock direction beside the hemorrhoid.

pain and an anal mass. Physical examination revealed, beside the hemorrhoid, a polypoid lesion with ulceration in the anus at the 6 o'clock direction (Fig. 1). The mass was excised *en bloc* with the hemorrhoid using a transanal approach.

The histologic evaluation revealed nests of mononuclear cells with abundant eosinophilic granular cytoplasm and bland nuclei (Fig. 2). Cell immunohistochemistry showed strong and diffuse positivity for S-100. These findings were compatible with granular cell tumor. Our followup of the patient has remained uneventful.

Discussion

Granular cell tumor is now identified as being of Schwann cell derivation based on immunohistochemical and histologic microscopic findings.¹⁻⁶ Over the years several cases of this tumor have been reported with a variety of localizations. The most common locations are the neck, the head, especially the tongue, the skin and subcutaneous tissues of the chest and upper extremities.^{9,10} The tumor may be

located anywhere in the body, but perianal localization is quite rare. Because of its relatively rare presentation, there have been few reports of the clinical findings of perianal granular cell tumor.³⁻⁶ Clinical symptoms of such granular cell tumors can include perianal discomfort and bleeding,³⁻⁶ but the most common clinical manifestation is the presence of an asymptomatic mass, and granular cell tumors have most often been detected incidentally during evaluation of other perianal disorders, such as hemorrhoids and fissures.³⁻⁵ Some such tumors have been clinically mistaken for an abscess.⁵ Mesenchymal tumors of the perianal region are relatively rare, and granular cell tumors are rarely observed in the perianal region.^{7,8} In our case, the mass was detected as an anal polyp with ulceration. It was diagnosed as a granular cell tumor by histologic examination, which is generally the case for granular cell tumors. The histopathologic findings of granular cell tumor are a noncapsulated group of large cells with characteristic eosinophilic granular cytoplasm that is caused by a massive accumulation of lysosomes.³⁻⁷ Similar to most

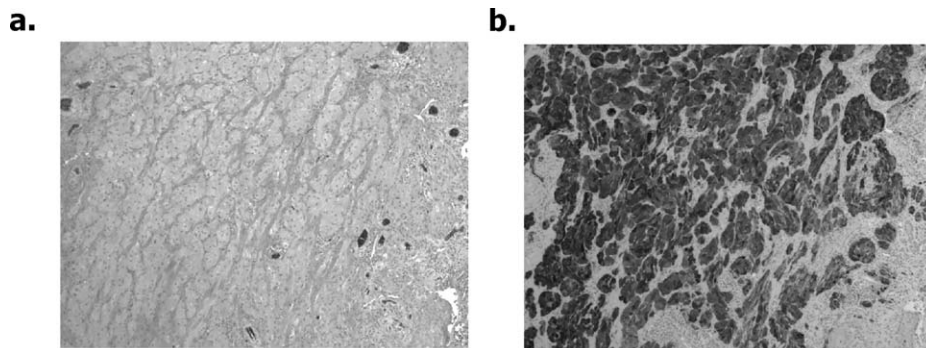


Fig. 2 (a) The histologic evaluation revealed a noncapsulated mass composed of nests of mononuclear cells with abundant eosinophilic granular cytoplasm and bland nuclei. (b) Immunohistochemically, these cells were strongly and diffusely positive for S-100.

nerve-derived tumors, granular cell tumors are notable for their constant and diffuse positive for S-100 antigen. Our case was treated surgically, as is recommended for granular cell tumors. Complete removal of the tumor not only helps in making a definitive diagnosis, but also in treatment.

In conclusion, we have reported herein report a case of anal granular cell tumor. Granular cell tumor of the anal region is rare, and benign perianal polypoid lesions are relatively uncommon clinical findings. They might present diagnostic challenges to surgeons and pathologists. Awareness of the differential diagnosis of granular cell tumors and careful microscopic examination might allow proper management and diagnosis.

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