

**Short Report**

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**An unusual localization of an Abrikossoff tumor****Kaoutar Mejjati<sup>1\*</sup>; Sara Elloudi<sup>1</sup>; Rasha Moumna<sup>1</sup>; Zakia Douhi<sup>1</sup>; Meriem Soughi<sup>1</sup>; Hanane Baybay<sup>1</sup>; Leyla Tahiri Elousrouti<sup>2</sup>; Fatima Zahra Mernissi<sup>1</sup>**<sup>1</sup>Department of Dermatology, University Hospital Hassan II, Fez, Morocco.<sup>2</sup>Pathology Department, University Hospital Hassan II, Fez, Morocco.**\*Corresponding Author: Kaoutar Mejjati**Department of Dermatology, University Hospital  
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**Abstract**

Abrikossoff's tumor, also known as Granular Cell Tumor (GCT), is a rare benign neoplasm commonly found in the cervicofacial region, particularly the oral cavity. Here, we present a case of GCT occurring in an atypical location on the left flank of a 43-year-old patient. The lesion presented as an erythematous ovoid nodule with central ulceration, accompanied by white structures and polymorphic vascularization on dermoscopy. Initially considered as Darrier-Ferrand's dermatofibrosarcoma, histopathological examination of a cutaneous biopsy revealed granular cells and eosinophils in the dermis, suggestive of GCT. Immunohistochemical analysis confirmed the diagnosis, expressing S100 protein and CD68. Complete surgical excision with safety margins was performed, with no recurrence observed after 1 year of follow-up. This case highlights the importance of considering GCT in the differential diagnosis of flank lesions and emphasizes the need for clinicians to remain vigilant for uncommon presentations of this rare tumor.

**Keywords:** Granular cell tumor; Abrikossoff's tumor; Immunohistochemistry; Surgical excision.

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**Introduction**

Abrikossoff's tumor, or Granular Cell Tumor (GCT), is a rare tumor, most often benign, with a ubiquitous distribution and a predilection for the cervicofacial region, particularly the oral cavity. Through this new observation, we report a case of GCT occurring in the flank region. This represents an atypical localization for this tumor type, emphasizing the need for clinicians to consider GCT in the differential diagnosis of flank lesions.

**Case presentation**

A 43-year-old patient, treated for an adrenal incidentaloma, consulted for a skin lesion that had been evolving for 6 months. Dermatological examination revealed an erythematous ovoid nodule, ulcerated in the center located in the left flank (Figure 1). Dermoscopy showed white structures and polymorphic vascularization (Figure 2). The rest of the examination found no associated abnormalities, in particular no palpable adenopathies.

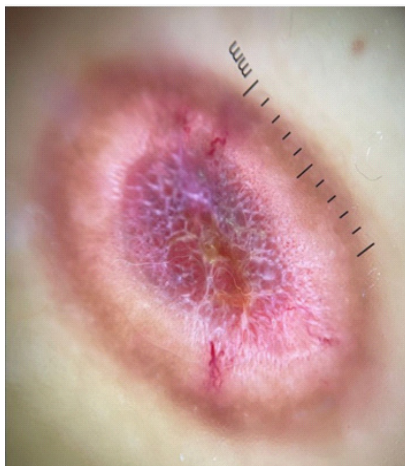
In the light of the clinical and dermoscopic data, we discussed a Darrier-Ferrand's dermatofibrosarcoma first. A cutaneous biopsy was performed, showing a proliferation in the dermis dissociating collagen fibers containing granular cells and eosinophils (Figure 3A,3B), suggestive of a granular cell tumor or a histiocytoma. The immunohistochemical study concluded that it was a GCT, expressing protein S100 and CD68 (Figure 3C,3D). Surgical excision with safety margins was performed with no recurrence after 1 year of follow-up.

**Discussion**

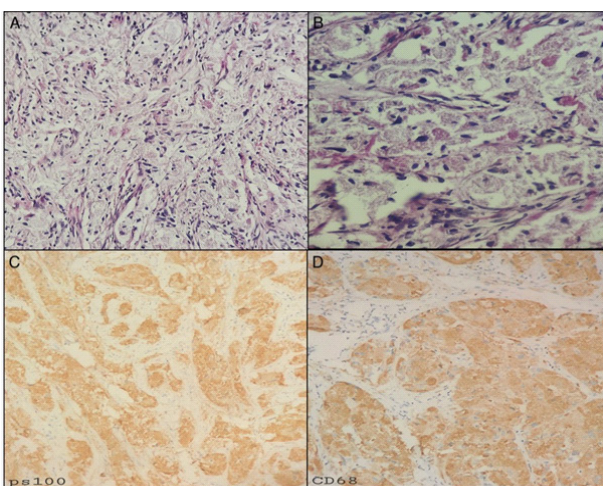
Abrikossoff's tumor or Granular Cell Tumor (GCT) is a rare benign tumor, first described by the Russian pathologist Abrikossoff in 1926, hence its name Abrikossoff's tumor [1]. It occurs between the second and sixth decade of life, and is more common in females [2]. It can appear in several soft-tissue and visceral sites, but the most common localizations are the head and neck (45%-65%), more than half of which are located in



**Figure 1:** Clinical presentation of the erythematous ovoid nodule on the left flank.



**Figure 2:** Dermoscopic findings showing white structures and polymorphic vascularization.



**Figure 3:** Histopathological examination revealing granular cells and eosinophils (A,B), and immunohistochemical analysis demonstrating expression of protein S100 and CD68 (C,D).

the oral cavity, mainly in the tongue [3,4]. However, other sites can also be affected, such as the esophagus, larynx, trachea, parotid gland, thyroid, lungs, breast, chest wall and genitals. GCT is usually single and asymptomatic, although, multi-focal forms are possible. Clinically, GCT presents as a firm, polyploid or sessile papule or nodule, with a smooth, granular or warty surface, pinkish, greyish or yellowish in color [5,6]. The diagnosis is histological. The tumor consists of a proliferation of large, polygonal cells with abundant eosinophilic cytoplasm and hyperchromatic nuclei. On immunohistochemistry, tumor cells express neurogenic markers, notably S100 protein, CD 68 and enolase, confirming the neuronal origin of the tumor. The differential diagnosis is mainly with dermatofibromas and neurofibromas. Treatment is based on complete surgical excision with safety margins to prevent recurrence.

### Conclusion

Granular Cell Tumor (GCT) is typically a singular and benign neoplasm, with histopathological diagnosis being crucial for confirmation. Surgical removal continues to be the primary approach for managing GCT. The uniqueness of our observation lies in the unusual localization of this tumor, emphasizing the importance of considering GCT even in atypical anatomical sites. This underscores the need for clinicians to maintain a broad differential diagnosis and remain vigilant for uncommon presentations of GCT.

**Conflict of interest :** none.

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