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An isolated pilomatricoma of the leg: a rare location - A Case Study

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ABSTRACT

Pilomatricoma is a rare, benign skin tumour arising from the hair matrix. The usual locations are the head and neck. Localization in the lower limbs is exceptional. The diagnosis of certainty is histological. Treatment is complete surgical removal to avoid recurrence. We report in this article the case of a rare localization of a pilomatricoma on the right leg, in a 25-year-old patient operated with complete surgical removal. The postoperative course was simple and without recurrence after 2 months of follow-up.

Introduction:

Malherbe's pilomatricoma or mummified epithelioma is a rare, benign skin tumour. Originally described in 1880 by Malherbe and Chenantais as a benign, calcified tumour of the sebaceous glands. In its typical form, pilomatricoma is a tumour of young people under the age of 20, which appears clinically as a small, solitary, asymptomatic and sometimes painful subcutaneous nodule, the most frequent locations of which are the head and neck ^[1].

Keywords: Pilomatricoma, Calcified epithelioma of Malherbe, Leg, Benign, Adult

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Observation:

A 30-year-old woman consulted for a nine-month history of swelling in her right leg. Clinical examination reveals a nodular swelling two centimeters in diameter, hard, painless, adherent to the skin but mobile in terms of depth. The skin above is marked by a reddish inflammatory fistula (Fig .1). The patient received a total removal of the tumor performed under local anesthesia

(Fig.2,3). The tumor nodule was encapsulated, indurated, and measured two centimeters in length. The pathological study identified sheets of basaloid and mummified cells with clearly visible cytoplasmic boundaries and with clear imprinted nuclei. Spots of keratinization and calcifications were observed. Pilomatricoma was confirmed as the main diagnosis. No recurrence was noted at two months' follow-up.



Fig 1: Clinical aspect of Pilomatricoma in the leg



Fig 2: Intraoperative aspect



Fig 3: Wound after total excision of the Pilomatricoma

Discussion:

Pilomatricoma is a benign adnexal tumor that is often overlooked and confused with other skin lesions. It is a rare lesion that occurs in less than 2% of all primitive skin tumors [2]. First described by Wickens in 1858 [3]. It occurs during the first two decades of life [1] with a higher frequency in females [4], the accuracy of its clinical and anatomopathological characteristics is attributed to Malherbe and Chenantais in 1880 [5]. Forbis and Helwing demonstrated in 1961 by an immunohistochemical study that the starting point of the tumor was the cells of the hair matrix [6]. The usual locations are the neck and head [7], with only exceptional isolated locations in the limbs, as in our patient.

Pilomatricoma typically is presented as an asymptomatic, round or oval, irregular, hard or firm subcutaneous nodule. The skin around the lesion is often bluish. The tumor is adherent to

the surface, whereas it is mobile in the deeper layers [3]. The tent sign described by Graham and Merwin, though not pathognomonic, is highly suggestive of the diagnosis [8]. Instead of being entirely round with a smooth surface, pilomatricoma has, on careful inspection, one or several flat faces which are separated from the rest of the tumor and between them are angular lines giving the impression of a tent.

The diagnosis of pilomatricoma must remain clinical and be confirmed histologically. Histology will help eliminate some differential diagnoses and the immunohistochemical study will facilitate the differentiation [9]. To the best of our knowledge, there has been one case of isolated pilomatricoma of the leg published in the literature [3].

Treatment of pilomatricoma consists of complete surgical excision with removal of a skin spindle, especially if the lesion is adherent to the dermis.

This is the baseline treatment to prevent the majority of reoffending ^[5]. The prognosis of pilomatricoma is generally good. Complete surgical excision is usually followed by a cure without recurrence ^[10,11].

Conclusion:

Pilomatricoma is a benign tumor of the hair follicle that should not be ignored. Localization in the limbs is exceptional. The diagnosis is clinical; the confirmation is histological. Its treatment is surgical.

CONFLICT OF INTEREST

The authors declare no potential conflict of interest.

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