

A pregnancy pilomatrixoma: an uncommon dermatologic benign neoplasm

**Ouiame El Jouari, Salim Gallouj, Zakia Douhi, Selma Benkirane, Hanane Baybay,
Fatima Zahra Mernissi**

Department of Dermatology and Venereology, University Hospital Hassan II, Fez, Morocco

Corresponding author: Dr. Ouiame EL Jouari, E-mail: eljouariouiame@gmail.com

ABSTRACT

Pilomatrixoma is a relatively rare tumour of the skin. It derived from primitive basal cells of epidermis that differentiate into hair matrix cells. It usually arises from the lids and eyebrows. Tumour appear as solitary, firm nodules, exhibiting a normal to pearl white epidermis. A 25-year-old female in her third month of pregnancy, presented with an asymptomatic erythematous nodule 7 weeks. Examination revealed an erythematous nodule, measured approximately 1, 5 cm in diameter firm, with yellowish zones and dotted with telangiectasia. Dermoscopy demonstrated yellowish lobules surrounded by crown-like branching vessels. Patient underwent surgical excision. Microscopic examination revealed a pilomatrixoma. After a follow-up of 10 months, the evolution was favorable without recurrence. We report the clinical, dermoscopic, therapeutic and evolutionary characteristics of a case of pilomatrixoma in order to help clinicians to better diagnose this entity and decrease the rate of misdiagnosis, especially in pregnant women.

Key words: Pilomatrixoma; Periocular; Pregnancy; Dermoscopy

INTRODUCTION

Pilomatrixoma is a relatively rare tumour of the skin derived from primitive basal cells of epidermis that differentiate into hair matrix cells. It comprises approximately 1% of all benign skin tumours. Pilomatrixoma is an uncommon lesion of the periocular tissues, it usually arises from the lids and eyebrows. Tumour appear as solitary, firm nodules, exhibiting a normal to pearl white epidermis. We describe an interesting case of a pregnancy pilomatrixoma arising from the left medial canthus.

CASE REPORT

A 25-year-old female in her third month of pregnancy, presented with an asymptomatic erythematous nodule. The patient reported that the lesion started as a small 3-mm papule and grew significantly to a 15 mm lesion in 7 weeks. Examination revealed an erythematous nodule, measured approximately 1, 5 cm in diameter,

Limited, with regular contours, firm, with yellowish zones and dotted with telangiectasia (Fig. 1). There was no palpable lymphadenopathy. Dermoscopy demonstrated yellowish lobules on an erythematous background, surrounded by crown-like branching vessels (Fig. 2). Patient underwent surgical excision of the lesion, out under local anaesthesia (Fig. 3). Microscopic examination revealed a regular squamous epithelium which has deep epithelial proliferation mummified cells with a very pale eosinophilic aspect, without having seen any nuclei. Presence of granulomatous reaction gigantocellular with a foreign body and calcifications (Fig. 4). After a follow-up of 10 months, the evolution was favorable without recurrence (Fig. 5). Prior to the study, patient gave written consent to the examination and biopsy after having been informed about the procedure.

DISCUSSION

Pilomatrixoma or calcifying epithelioma of Malherbe is a benign skin tumor. It can occur at any age;

How to cite this article: El Jouari O, Gallouj S, Douhi Z, Benkirane S, Baybay H, Mernissi FZ. A pregnancy pilomatrixoma: an uncommon dermatologic benign neoplasm. Our Dermatol Online. 2018;9(4):425-427.

Submission: 07.01.2018; **Acceptance:** 31.03.2018

DOI:10.7241/ourd.20184.17



Figure 1: An erythematous nodule, measured 1, 5 cm in diameter, Limited, with regular contours and yellowish zones and dotted with telangiectasia.

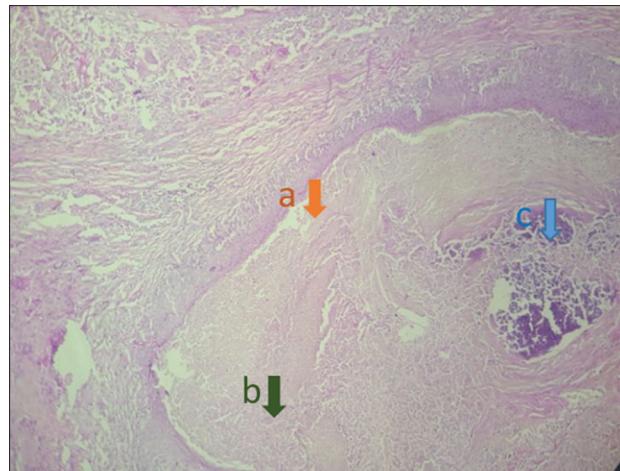


Figure 4: Histological section with coloration HE G x 50, presence of basaloid cells (a) and mummified cells (b) with abrupt transition between the two and presence of calcifications (c).

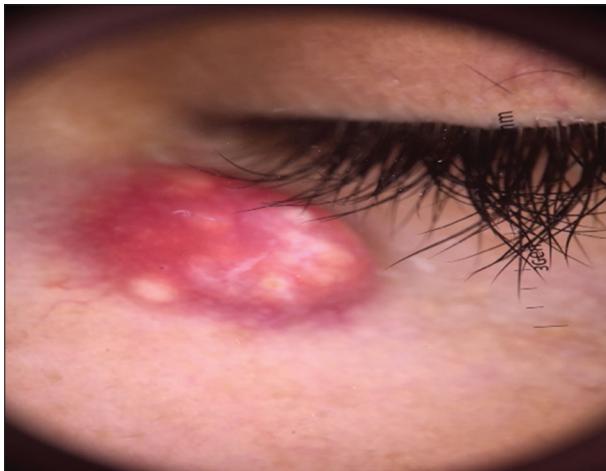


Figure 2: Yellowish lobules on an erythematous background, surrounded by crown-like branching vessels.

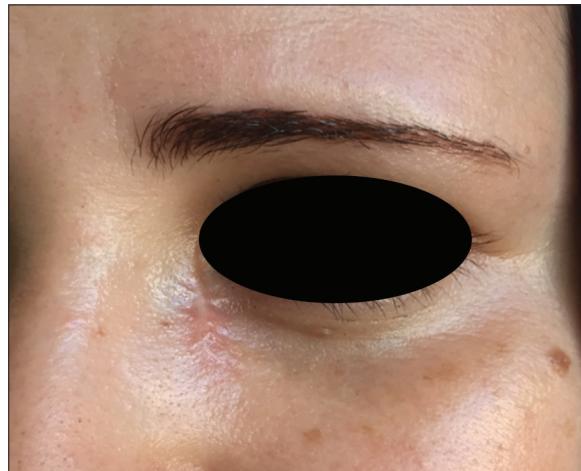


Figure 5: After a follow-up of 10 months.



Figure 3: Image after resection of the tumor.

congenital forms have been reported. It affects women particularly with a sex ratio of 1.5 [1]. No identified

risk factor for the occurrence of pilomatrixoma, including pregnancy. The typical clinical aspect of the pilomatrixoma is an irregular round or oval asymptomatic subcutaneous nodule of hard or firm consistency. The skin facing the lesion is often bluish. The tumor adheres to the superficial plane, while it is relatively mobile to the deep plane. The most common locations are the head, neck, and upper extremities. There are different clinical forms, perforating, ulcerated, anetodermic with an erythematous skin facing the lesion or pigmented [2].

Dermoscopy help to make the diagnosis, dermoscopic findings of pilomatrixoma reported in the literature are yellowish-white structures together with streaks, linear irregular vessels and hairpin like vessels [3,4]. However Confirmation of diagnosis is histological.

Histopathologic examination reveals the tumor to be grossly well circumscribed and firm to gritty in consistency. Microscopic examination shows numerous islands of epithelial cells with characteristic arrangement of basophilic cells in the periphery and shadow cells in the center. As the tumor matures the number of basophilic cells loses their nuclei and becomes shadow cells. Calcification is seen in 75% of the cases. Sheets of intensely eosinophilic keratinous material is seen within necrotic areas, and this may induce a foreign body giant cell reaction [5]. The histopathologic findings of the case described in this reported are similar.

The reference treatment of the pilomatrixoma is complete surgical excision, to avoid the risk of recurrence. The prognosis of the pilomatrixoma is good [6].

CONCLUSION

Because of the low incidence and variable clinical presentation, pilomatrixoma is a tumor not commonly suspected preoperatively. This presentation may help clinicians to better diagnose this entity and decrease the rate of misdiagnosis. Especially in pregnant women.

CONSENT

The examination of the patient was conducted according to the Declaration of Helsinki principles.

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Source of Support: Nil, **Conflict of Interest:** None declared.