

## A case report of a head full of trichilemmal cysts

M Alami, O Guennoun\*, M Benlamlih, D Kamal and MN El Alami

*ENT and Maxillofacial Surgery Department, Omar Drissi Hospital, CHU Hassan II, Faculty of Medicine and Pharmacy, University Sidi Mohammed Ben Abdellah (USMBA), Fes-Morocco.*

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### Abstract

Trichilemmal cysts are considered the most common form of cutaneous cysts in the scalp, most often in middle-aged females. They can be solitary or multiple, gradually increasing in size and number, but it is unusual to find very large numbers of cysts.

We describe here the case of a 53-year-old woman who presented with multiple trichilemmal cysts, along with a squamous cell carcinoma. Surgical removal was performed and the diagnosis was confirmed on histological examination.

The clinical features of trichilemmal cysts are relatively straightforward; however, the histological confirmation is always necessary to confirm the diagnosis and discard other differential diagnosis.

**Keywords:** Trichilemmal cyst; Scalp; Surgical excision; Case report

### 1. Introduction

Trichilemmal cysts, also known as pilar cysts, are part of the sebaceous cysts family and occur in about 10% of the population [1]. They are far and away considered the most common form of cysts affecting the skin of the scalp.

Pilar cysts have no known racial predilection, and they occur more commonly in women than in men. Family history may be present since the disease follows autosomal dominant inheritance in some cases [2].

The myriad and the size of the cysts in our patient are what made her case particularly distinct.

### 2. Case presentation

A 53-year-old female patient presented to the Outpatients Clinic of the Department of ENT and Maxillofacial Surgery, Hassan II University Hospital, seeking the removal of multiple tumors on her scalp.

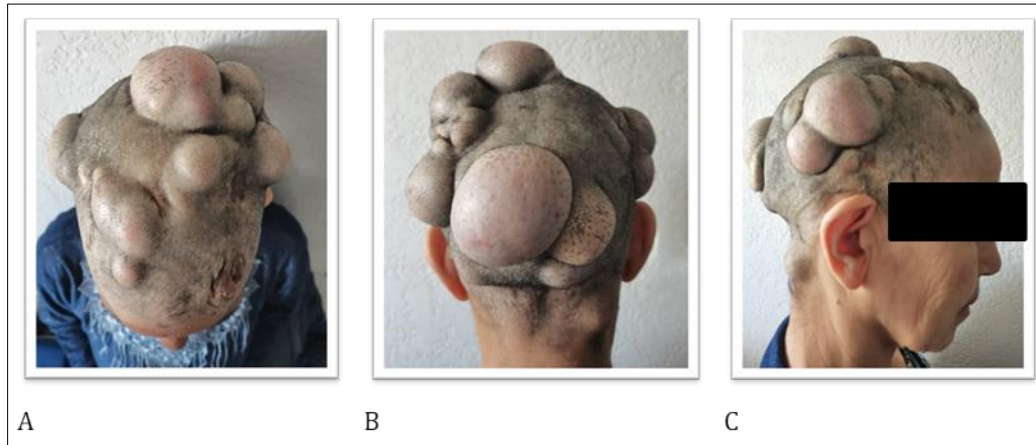
According to the patient, the voluminous masses over her head had appeared many years ago and had grown slowly since then, and others occurred during this time.

She had no notable medical history nor a family history of similar disease.

\* Corresponding author: O Guennoun

Clinical examination revealed more than fifteen hard, smooth, rounded intradermal swellings of various sizes, ranging from 1 cm for the smallest to around 8 cm for the largest, scattered over the scalp and nape of the neck [Figure 1]. They were painless, but caused considerable discomfort.

A single ulcerated and burgeoning lesion was located on the left anterolateral side of the scalp, for which dermoscopic examination suggested squamous cell carcinoma.

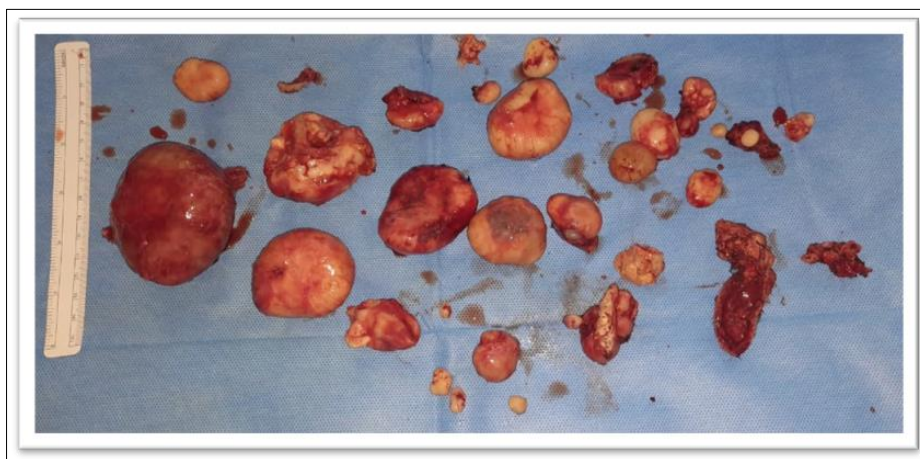


**Figure 1** Clinical aspect of the patient, head shaved, prior to surgery: Superior (A), posterior (B) and lateral (C) aspect of tumors. The tumors are of different sizes, covered with intact skin and are asymmetrically scattered over the scalp.

A CT- scan was performed showing an intact bone, underneath the lesions.

Under general anesthesia, the skin was incised at the apex of the respective large masses and the tumors were extracted. On palpation, numerous small cysts were identified and removed. The excess skin was excised, enabling the wounds to be closed without tension.

Excision of the squamous cell carcinoma was performed with a 1cm margin, leaving the wound healing by secondary intention.



**Figure 2** The cysts vary in size and indicate that these lesions apparently developed over a very long period of time and at different time points

Healing and follow up were uneventful and patient was satisfied by the surgical treatment.

The pathology report stated that all cysts were benign and final diagnosis was multiple trichilemmal cysts of the scalp.

Moreover, the squamous cell carcinoma was confirmed as well and its resection was complete with safe margins.



**Figure 3** Aspect of the scalp: Superior (A), and lateral (B & C) following the surgery

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### 3. Discussion

Trichilemmal cysts are common dermal cysts, primarily affecting the skin of the scalp. They derive from the root sheath of the hair follicle, located in the epithelium between the sebaceous gland and the arrector pili muscle. They are lined by stratified squamous epithelium lacking a granular cell layer and filled with keratin and breakdown products [1].

Trichilemmal cysts never give rise to malignant lesions [2]. Although pilar cysts have no known racial predilection, they are more often present in women than men [2]. The presentation is sporadic, as in our patient's case, or inherited as an autosomal dominant trait.

Pilar cysts are described as smooth, rounded, intradermal nodules that are slow-growing and take several years to develop. In 89% of individuals, they are on the scalp [3].

Complications of pilar cysts include proliferating trichilemmal cysts, the tumor form of pilar cysts, which results from less than 3% of all cases of pilar cysts. These lesions may ulcerate and become locally aggressive [2]. Our patient noticed her first cysts twenty years ago and noticed that they were slowly growing. However, she denied pain and acknowledged that the lesions were becoming more and more uncomfortable, with their increasing in size and number.

Inflamed, ruptured cysts that are not infected may resolve spontaneously without therapy, although they tend to recur [1]. Nevertheless, the main treatment of trichilemmal cyst is essentially a radical surgical excision of the lesion including the wall of the cysts to avoid the recurrence. Ideally, excision is performed outside an episode of acute inflammatory episode because inflammation causes the friability of the cyst wall, which increases the chances of recurrence [4]. Then the content should be sent to the pathology department to confirm the diagnosis [2], as done in this case.

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### 4. Conclusion

Trichilemmal cysts are benign tumors, and their multiple presentation is described in the literature. Surgical treatment restores the aesthetic shape of the head; further more radical extirpation reduces the risk of recurrence.

The diagnosis is confirmed on study of the surgical specimen, which allows it to be retained histologically.

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### Compliance with ethical standards

#### *Disclosure of conflict of interest*

No conflict of interest to be disclosed.

#### *Statement of informed consent*

An informed consent for publication purpose was obtain from the patient.

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