

A Rare Tumor of the Scalp: Papilliferous Cystadenoma

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Abstract

Introduction: Papilliferous cystadenoma is a rare adnexal tumor of early childhood. **Case Report:** We report a case of papilliferous cystadenoma of the scalp in a 22-year-old adult with no previous history of the disease. She had been presenting with a slowly progressing scalp mass for about 10 years. The mass was mildly pruritic and painless, but the patient reported several painful episodes treated with local herbal applications and unspecified antibiotics. On inspection, the lesion was raised, granular, sessile and vegetated, greyish in color, with an irregular surface, nipped and hemispherical in shape. On palpation, the lesion was painless, fleshy and surrounded by crusts that were easily removed by applying a saline-moistened compress. The patient underwent excision with at least 4-mm margins. Pathological examination of the operative specimen revealed a papilliferous syringocystadenoma. There was no tumor recurrence after three years. **Conclusion:** Papilliferous cystadenoma is a rare benign tumor of the scalp requiring clinical analysis and surgical excision to confirm its histological nature. Post-operative follow-up is necessary due to frequent recurrences.

Keywords

Scalp, Tumor, Papilliferous Cystadenoma

1. Introduction

Papilliferous cystadenoma is an adnexal tumor often present from birth or in children before puberty [1]. It is a benign tumor, often asymptomatic, with a highly variable clinical presentation. They are treated surgically, at the same time allowing anatomopathological examination to identify the histological type. The papilliferous form is a very rare type, especially frequent in children. We report a case of granulomatous papilliferous tumor of the scalp and the therapeutic ap-

proach adopted.

2. Observation

This was a 22-year-old female patient with no particular pathological history, followed at the Hôpital d'Instruction des Armées in Cotonou. Her personal and family history was unremarkable. There was no history of pre-existing lesions of the sebaceous nevus type. She had been presenting with a slowly progressing scalp mass for about 10 years. The mass was mildly pruritic and painless, but the patient reported a few painful episodes treated with local herbal applications and unspecified antibiotics. She reported concomitant febrile episodes. A few episodes of bleeding on contact were reported over the last five years or so. On inspection, the lesion was raised, granular, sessile and vegetative, grayish in color, with an irregular, mamelinated surface, hemispherical in shape and measuring 7 millimeters in diameter. On palpation, the tumour was painless, fleshy and surrounded by crusts, which were easily removed by applying a saline-moistened compress (**Figure 1** and **Figure 2**). The patient underwent excision with at least 4-mm margins (**Figure 3**). Pathological examination of the operative specimen revealed a papilliferous syringocystadenoma (**Figures 4-9**). There was no tumor recurrence after three years.



Figure 1. Aspect of scalp tumor.



Figure 2. Appearance after shaving and stripping.



Figure 3. Appearance at incision.

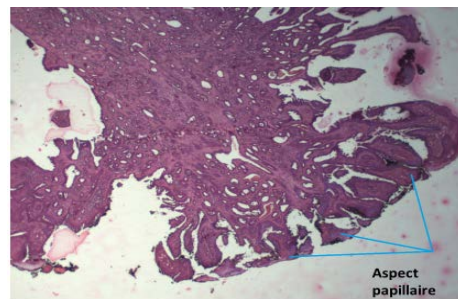


Figure 4. Papillary appearance (hematoxylin and eosin stain, magnification $\times 2.5$).

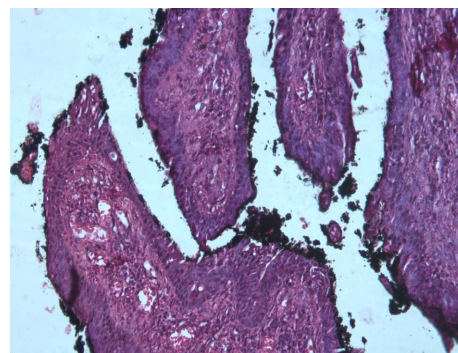


Figure 5. Multi-layered epithelium on surface (hematoxylin and eosin stain, magnification $\times 20$).

3. Discussion

Papilliferous cystadenoma is a benign adnexal tumor of the apocrine or eccrine sweat glands. It is a rare tumor in adults. It is common in childhood, and may be congenital [2]. In our case, the tumor had been evolving since adolescence. Histologically, the tumor is characterized by cystic, papillary and ductal invaginations in the dermis, lined by a double-layered external cuboid epithelium and a high-lumen cylindrical epithelium and connected to the epidermis. This tumor

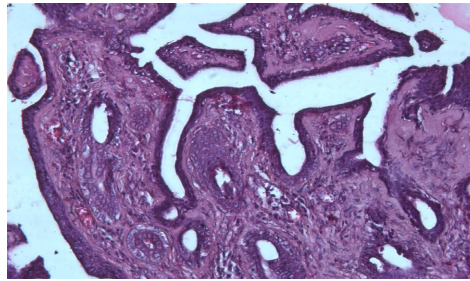


Figure 6. Invaginated epithelium (hematoxylin and eosin stain, magnification $\times 20$).

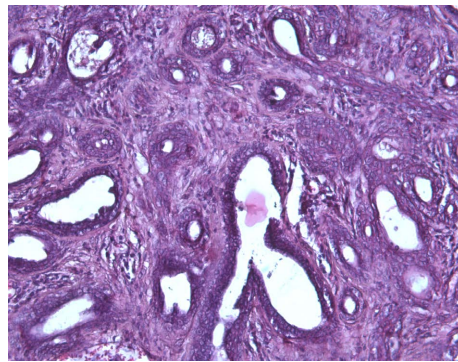


Figure 7. Bistratified epithelium (hematoxylin and eosin stain, magnification $\times 20$).

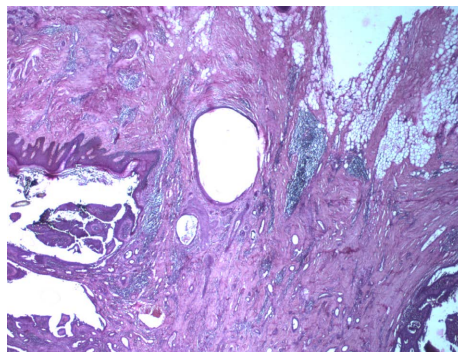


Figure 8. Lymphoplasmacytic infiltrate (hematoxylin and eosin stain, magnification $\times 2.5$).

can simulate a viral infection of the scalp, particularly in children (molluscum contagiosum and verruca vulgaris). The same histological type has been described on the eyelid [3] or in the external acoustic meatus [4]. Clinically, benign adnexal tumours usually present as firm, elastic, non-ulcerated, skin-coloured or erythematous lesions, often of varying sizes. They usually remain asymptomatic for a long period and grow very slowly [5]. In our case, the tumour had been evolving for around 10 years. Progression was slow, with occasional episodes of superinfection. The nodular presentation may occasionally ulcerate [6]. Surgical excision should be carcinological, on the assumption of a possible malignant nature [7], particularly in cases where the biopsy was not performed to determine

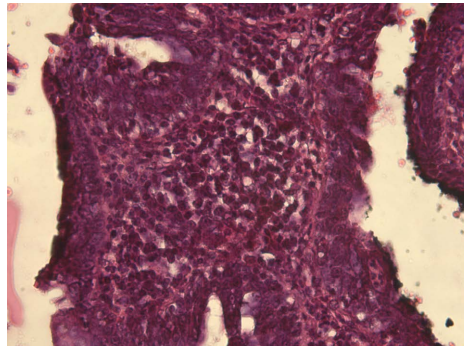


Figure 9. Lymphoplasmacytic infiltrate (hematoxylin and eosin stain, magnification $\times 40$).

the histological nature. Malignant degeneration is possible, especially after the age of 40 [8] [9] [10]. In the case of these adnexal lesions of the pilaris, sweat or sebaceous glands, clinical recognition is uncertain, and the benign nature of the lesion cannot be formally confirmed before pathological examination. Surgical resection must therefore be complete, with minimal margins. Reconstruction of the loss of substance is performed either by direct approximation or by local flap. In the case of extensive loss of substance, skin grafting may be considered. In all cases, the reconstruction method should be adapted to the patient's state of health, wishes and aesthetic considerations [11]. In our case, the patient had used traditional treatment based on indigenous scarification and multiple antibiotics without a medical prescription. This raises the issue of self-medication. Self-medication with traditional plants and pharmaceutical products is a social phenomenon undermining sub-Saharan Africa, and our country in particular. In Parakou, northern Benin, Hounkpatin *et al.* found that 62.4% of patients had self-medicated prior to ENT consultation [12]. The drugs used were paracetamol, followed by various antibiotics. In Cotonou, southern Benin, a similar survey [13] showed a prevalence of self-medication of 47.88% of patients undergoing ENT consultations, all diagnoses combined. This phenomenon was more common in children and adolescents under 20 [14]. Episodes of superinfection could be assimilated to complications linked to traditional herbal treatment. The hot, humid climate and atmospheric pollution in sub-Saharan Africa could be factors that have favored these episodes of superinfection. These complications confirm the finding that infectious pathologies predominate among ENT disorders, accounting for more than half of all diagnoses, particularly in children [14] [15]. Raising people's awareness, increasing their purchasing power and improving the availability of health services are the main ways of reducing the scourge of self-medication in Africa.

4. Conclusion

Scalp tumours require clinical analysis to assess the risk of malignancy. In all cases, surgical excision enables removal and confirmation of the histological nature of the tumour. In principle, resection is carcinological, with minimal mar-

gins. Post-operative follow-up is essential, as recurrence is frequent. Syringocystadenoma is a rare cause.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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