CASE REPORT

Sebaceoma overlying a nevus sebaceous: A case report

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Abstract

Sebaceoma is a benign tumour with sebaceous differentiation typically presenting as a yellow papule or nodule over the face and scalp. It is not uncommon for secondary growths like sebaceoma to be found over a nevus sebaceous. Here, we present a histologically proven case of sebaceoma arising from Nevus Sebaceous of Jadassohn, to highlight the significance of histopathological examination in a case of overgrowth over nevus sebaceous to rule out neoplastic transformation.

Keywords: Adnexal tumors, Sebaceous Neoplasm, Organoid Nevus

Introduction

Sebaceoma (synonym: Sebaceous epithelioma) is clinically described as an ill-defined plaque, or a singular, circumscribed nodule, yellow in colour, commonly found on the scalp or face, and rarely on the ear and eyelid. In rare instances, these benign adnexal tumours are known to arise from nevus sebaceous (non-neoplastic congenital malformation that includes follicular, sebaceous, and apocrine elements, presenting as a yellow-orange, waxy and verrucous plaque, over a hairless area over the scalp in most cases) [1]. Sebaceomacan be multiple and can also occur in association with Muir-Torre syndrome [2]. While, secondary overgrowths over a nevus sebaceous of Jadassohn are quite common, this case in particular has been reported to highlight the significance of histopathological examination to rule out neoplastic transformation as these lesions have a tendency for malignant change with increasing age.

Case Report

A 41-year-old male came to the dermatology outpatient department with complaints of a single, raised, dome shaped lesion overlying a raised waxy lesion on the scalp forsix months and was associated with pain on touch. The patient reported history of analopecic patch over the scalp since birth, which at puberty gradually started increasing in thickness to form a raised lesion.Six months back, over this lesion, there occurred a dome shaped yellowish lesion. On cutaneous examination, a yellow-coloured, firm, well circumscribed nodular lesion, measuring 1 cm × 0.5 cm, was noted over the periphery of a circumscribed yellowish waxy verrucous plaque without hair over the vertex of scalp (Figure 1). Lymph node examination revealed no abnormality. The patient had no significant past or family history. The patient underwent an excisional biopsy for the nodular lesion, under local anaesthesia in aseptic conditions. Histopathological examination revealed a well circumscribed lobulated skin adnexal tumouroccupying the dermis with areas of cyst formation as seen in scanner view (Figure 2).

The cells were predominantly monomorphic i.e., basaloid (>50%) admixed with haphazardly distributed sebocytes. Duct-like structures containing holocrine secretions (crenelated eosinophilic lining) were also seen, all these features best appreciated in high power (Figure 3). There was no cellular atypia. Dermoscopy showed yellowish homogenous ovoid areas with arborising vessels over the nodule (Figure 4). A diagnosis of Sebaceoma was established with histopathological and clinical correlation. This lesion was overlying a nevus sebaceous, diagnosed based on the characteristic history and clinical presentation.

Figure 1: Yellow colored nodule of sebaceoma overlying verrucous plaque of nevus sebaceous

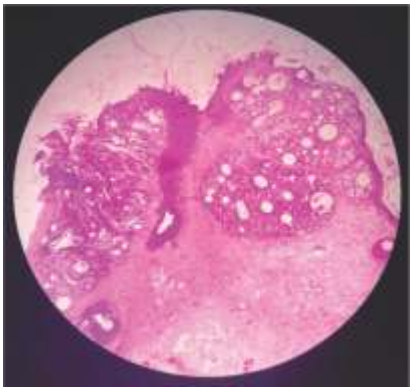

Figure 2: Well circumscribed lobulated skin adnexal tumour occupying the dermis (4×)

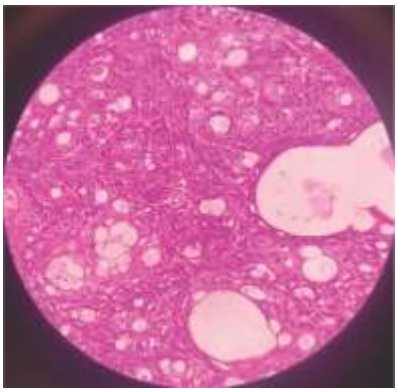

Figure 3: Predominantly monomorphic i.e., basaloid cells admixed with haphazardly distributed sebocytes and duct-like structures containing holocrine secretions (crenelated eosinophilic lining) (40×)

Figure 4: Dermoscopic picture showing homogenous yellow ovoid areas with numerous arborising vessels

Discussion

Sebaceous neoplasms are a group of infrequent adnexal tumours representing a wide range of lesions both benign and malignant along with associations with syndromes like Muir-Torre and epidermal nevus syndromes. These constitute conditions like nevus sebaceous, sebaceous hyperplasia, sebaceous adenomas, sebaceoma, sebaceous carcinoma, basal cell carcinoma with sebaceous differentiation, mantleoma, sebomatrixoma, seboacanthoma and keratoacanthoma [3]. Sebaceoma, described as a benign skin adnexal tumour with sebaceous differentiation, can develop as a primary lesion or as a subsequent tumour to either nevus sebaceous or seborrheic keratosis [4]. The lesions are typically found on the head, face, and neck, and are clinically described as yellowish papules with rolled borders. The lesions are usually solitary and 1 cm in diameter, but bigger lesions have also been observed. Bleeding and ulceration are frequent findings [5].

Sebaceous neoplasms can be associated with Muir-Torre syndrome, a rare autosomal-dominant genodermatoses characterised by sebaceous neoplasms and one or more visceral malignancies, commonest being carcinoma of the colon [6]. It should be noted that sebaceous adenomas are the commonest sebaceous neoplasm associated with this syndrome especially when they occur below the neck. Dermoscopy usually shows central yellow homogenous ovoid areas against a yellow background, with arborizing vessels at the periphery of the nodule radiating towards the centre (crown vessels) [7]. Histopathologically, a sebaceoma can exhibit a number of patterns like reticulated, cribriform, adenoid, cystic, rippled and cornified. Sebaceomas ought to be differentiated from sebaceous adenomas, trichoblastomas with sebaceous differentiation, poroma with sebaceous differentiation, basal cell carcinoma with sebaceous differentiation and sebaceous carcinoma. Sebaceomas are vastly different from sebaceous adenomas histopathologically, in that while the former has a predominant basaloid cell composition (>50%) with scattered sebocytes and no cellular atypia, the latter, i.e., sebaceous adenoma, will show highly organized, irregularly shaped lobules of sebocytes with an outer rim of multiple layers of small germinal cells and <50% of basaloid cells. While immunohistochemistry will not enable the differentiation between these two entities, immunohistochemical stains like epithelial membrane antigen, adipophilin, D2-40 can be used to confirm a sebaceous origin [8]. Nevus sebaceous of Jadassohn, a hamartoma of the pilosebaceous unit, exhibits three stages: a hairless plaque at birth (stage one: early life) which at puberty (stage two) develops into a yellowish, waxy, verrucous plaque. It is usually during the third stage (adulthood) that nevus sebaceous starts developing secondary tumours some of which include trichilemmoma, trichoblastoma, syringocystadenoma papilliferum, sebaceous adenoma, sebaceoma, sebaceous carcinoma, apocrine adenoma, poroma and basal cell carcinoma. There is a propensity for neoplastic transformation of these tumours with increasing age [9]. Full thickness excision is the curative treatment for sebaceoma as well as for nevus sebaceous.

Conclusion

While secondary overgrowths over the nevus sebaceous of Jadassohn are quite common, this case in particular has been reported to highlight the significance of histopathological examination to rule out neoplastic transformation as these lesions have a tendency for malignant change with increasing age.

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