Sebaceous Cyst of the face: A Report of Five Cases Treated in A Teaching Hospital in North-West, Nigeria

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ABSTRACT

Objective: Sebaceous cysts are keratin filled cysts that occur in the hair bearing areas of the body like the scalp, face, neck, back and scrotum. They present as an asymptomatic swelling. Although these cystic lesions are benign, they need to be treated as soon as possible as they cause disfigurement of the face in head and neck region. There are various modalities of treatment of these cysts, the commonest is surgical excision. We report five cases of sebaceous cysts affecting the face which were treated with surgical excision. The objective of the study was to present the clinical features and management of sebaceous cyst of head and neck region.

Methods: This study was a retrospective review of cases of sebaceous cyst in the head and neck region treated in the Maxillofacial unit of Barau Dikko Teaching Hospital, Kaduna between September, 2014 to June, 2020.

Results: Five cases were treated, 3 males and 2 females. The age range was 29 to 49 years. Mean age was 39 years. Four cases had a single lesion each, while one had multiple facial lesions.

Conclusion: Sebaceous cysts could cause significant facial disfigurement. Surgical excision is regarded as the ideal treatment and is associated with excellent outcome.

Keywords: Sebaceous cyst, epidermoid cyst, face, cheek.

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INTRODUCTION

Sebaceous cysts are keratin-filled epithelial lined cysts and are formed out of sebaceous gland.[1] The sebaceous gland produces the oil (called sebum) that coats the hair and skin.[1] They are subcutaneous cyst occurring due to obstruction of pilosebaceous ductal opening.[2] Sebaceous cyst are asymptomatic, soft, cystic and fluctuant in consistency unless infected. They commonly occur in hair-bearing areas like the scalp, face, neck, back and scrotum.[3]

Trauma has been implicated in the aetiology of the cyst. This may be a scratch, a surgical wound, or a skin condition, such as acne. Sebaceous cysts grow slowly, so the trauma may have occurred weeks or months before the cyst is noticed. Other causes of a sebaceous cyst may include: misshapen or deformed duct; damage to the cells during a surgery; genetic conditions such as Gardner's syndrome or Basal cell nervous syndrome.[3]

Clinically, a sebaceous cyst has a punctum. Punctum is a black coloured (necrosed) part of the skin over the swelling which is attached to the underlying cyst.[2] They usually vary in size from few millimeters (mm) to several centimeters (cm) in diameter; and usually dome shaped and contain thick, greasy, cheese like substance.[3] They usually occur in singly, and few

times in multiple.[4] Sebaceous cyst is rarely present before adolescent, but common in adult and middle age patient.[3]

Histological examination of sebaceous cysts revealed epithelial lined cyst filled with laminated keratin located within the dermis. The lining of the cyst is similar to the surface epithelium but differs in that it lacks rete ridges.[4] A granular layer is present that is filled with keratohyalin granules.[4]

Surgery is the only treatment for sebaceous cysts, and the goal is to completely remove the cyst to prevent reoccurrence and achieve the best cosmetic result, which means less or no scar on the skin.[5,6] Sebaceous cysts are not common skin lesions and there are scanty literatures about it, therefore, we retrospectively reviewed cases treated in the Maxillofacial Clinic, Barau Dikko Teaching Hospital, Kaduna, Nigeria.

MATERIALS AND METHODS

This was a retrospective study of cases of sebaceous cyst in the head and neck region treated at the Maxillofacial Clinic, Barau Dikko Teaching Hospital, Kaduna, Nigeria from September 2014 to June, 2020. Records of patients were obtained from Clinic register and operation register. The case folders of the patients were retrieved and analyzed for age, sex, site, clinical features and treatment received. Patients were followed up for a period of 6 months to 1 year.

RESULTS

Five cases were treated, 3 males and 2 females. The age range of the cases was 29 to 49 years, mean age was 39 years. Four cases had single lesion, while one had multiple facial lesions. A summary of the clinical features and surgery is presented in table 1. Surgical excision was the modality of treatment for all our cases. The outcome of our treatment was satisfactory and no recurrence in cases that were reviewed at 6-months and 1-year follow up.

Clinical Features

Cheek: The swelling was warm, non-tender. It was soft in consistency, cystic and non-pulsatile. No colour change seen (Fig. 1a)

Forehead: The cyst was soft, but mobile. The size was 2cm in size.

Postauricular: Solitary, well circumscribed, round in shape, bulging, sessile, smooth swelling with well delineated margins.

Table 1: Summary of the clinical features and surgical management of the cases presented

Cases	Site	Age	Sex	Duration	Number	Treatment
1	Forehead	43	M	8months	Single	Excision
2	Post auricular	44	M	1year	Single	Excision
3	Cheek	38	F	6months	Multiple	Excision
4	Cheek	29	F	6months	Single	Excision
5	Cheek	46	M	2years	Single	Excision

Investigation report: Ultrasound picture of the swelling revealed a well-defined avascular hypo echoic 36 X 14 mm at subcutaneous planes of the cheek suggesting sebaceous cyst for case 5.

Surgical procedure: Under local anaesthesia and with aseptic precautions, an incision was placed on the skin overlying the cyst and by careful dissection; excision of the cyst was done. (fig.1b). After haemostasis was achieved, the wound was closed in layers with sutures. The post-operative period was uneventful and the wound healed satisfactorily. The excised lesions were sent to the laboratory for histopathology.

Histopathology Report: Microscopically, these tissues revealed cyst lined by stratified epithelium with a granular layer and keratinous material, arranged in laminated layers (Fig.2). Based on the histopathological features, diagnosis of sebaceous cyst was made.

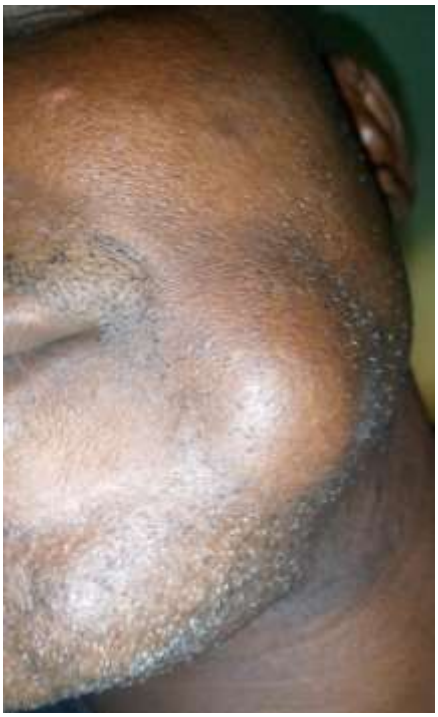

Fig.1a. A 46-years old patient with sebaceous cyst on the left cheek

Fig. 1b. The exposed cyst

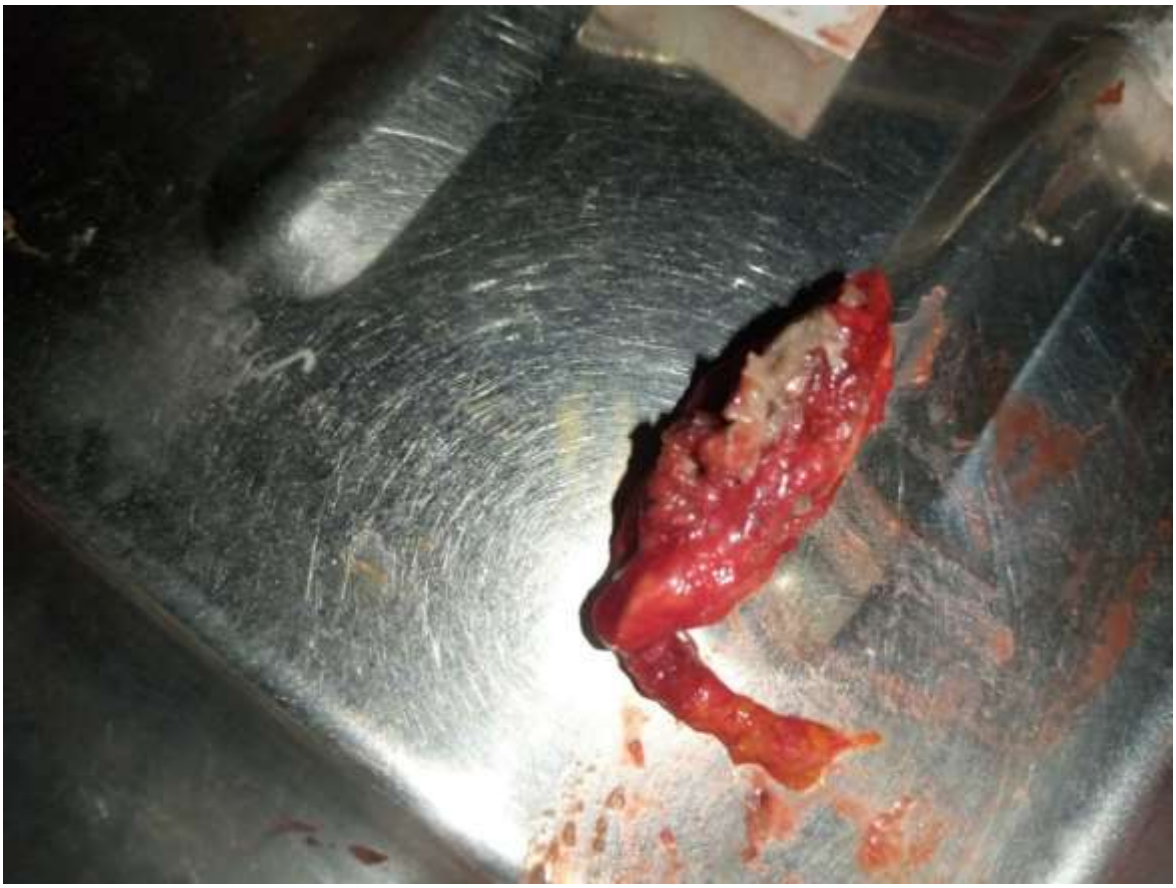

Fig. 1c. The excised cyst

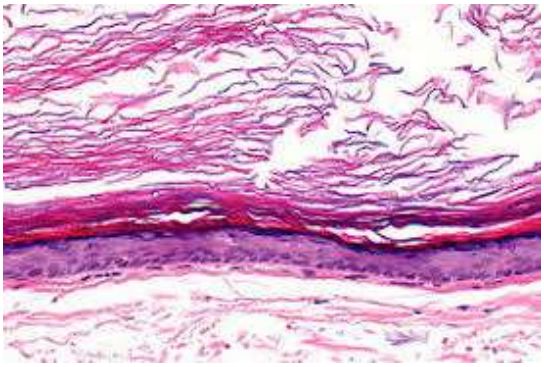

Figure 1d. Histology of sebaceous cyst

DISCUSSION

Sebaceous cysts are mostly found on the face, neck and scrotum. [3] These cysts grow slowly and are not life threatening, but they may cause obvious disfigurement if they grow unchecked. The duration of growth of the cyst in these cases presented ranged from 6-months to 2-years (Table 1). Small cysts are typically not painful. Large cysts can cause discomfort and can be painful. [4] Case 4 in our report had a large single lesion on the left cheek (Fig. 1a) and complained of pains which occurred during speech. The cyst commonly occurs as a single swelling, but in rare cases can be multiple.[5] Four of our cases were single but one of the cases (case 3) had multiple swellings on both cheeks. Cysts can develop if the sebaceous gland or its duct (the passage from which the oil flows to skin surface) becomes damaged or blocked. This usually occurs due to a trauma to the area.[3] Case 1 in our report gave a history of assault to the face, but others could not remember what have caused their own swelling. Sebaceous cysts are typically filled with white flakes of keratin, which is also a key element that makes up the skin and nails.[5] All our cases were filled with keratin flakes (Fig. 1b). The cysts were soft, fluctuant and did not trans-illuminate. There was a dark region (necrosed) on the skin overlying the cyst, this is the punctum.[6] All our cases had punctum.

There are various methods of treatment that have been advocated for sebaceous cyst which include: conventional wide excision - which completely removes a cyst but can leave a longer scar; minimal excision - which causes minimal scarring but carries a risk that the cysts will reoccur; laser with punch biopsy excision - which uses laser to make a small hole to drain the cyst of its contents (the outer walls of the cyst are removed about a month later).[5,6] All our cases had wide surgical excision except case 3 that had minimum excision because she had multiple lesions. When the diameter of the cyst is larger than five centimeters, there is tendency for recurrence after being excised.[2] No case of recurrence was recorded in our reviewed cases.

Signs that the cyst is infected include: redness, pain and pus discharge. Once infected the cyst becomes painful, firm in consistency and can undergo spontaneous rupture to discharge its contents into the dermis which is difficult to retrieve, and may lead to heavy scar .[5]

None of our cases was infected. The differential diagnosis of sebaceous cysts includes fibroma, lipoma, furuncle, carbuncle and abscess. [6-8]

CONCLUSION

Sebaceous cysts are slow growing lesions, and causes less discomfort except obvious facial disfigurement when they are very large or multiple lesions. Surgical excision of the cyst gives excellent outcome.

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Conflict of interest
None declared

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