



Case Report

Malignant transformation in sebaceous cyst- A case report

Pammy Sinha^{*1}, Jyothi B.Lingegowda², R.Thamil selvi¹

¹Professor, Department of Pathology, VMKV Medical College, Salem, Tamilnadu.

²Assistant Professor, Department of Pathology, VMKV Medical College, Salem, Tamilnadu.

ABSTRACT:

Sebaceous cysts are among the most frequent skin lesions that are removed in an outpatient clinic. We encountered a case of malignant transformation in a long-standing sebaceous cyst of the scalp in 65 year old male. Carcinoma developing in sebaceous cysts has been frequently reported in the literature. This neoplasm often arises in the scalp of elderly in long existing cysts.

KEY WORDS: Malignant transformation, Sebaceous cyst.

INTRODUCTION:

Sebaceous cysts are commoner than is realized because of minor inconvenience and are ignored by the patients [1]. However, in older patients who have had a sebaceous cyst of relatively longer duration on the face or scalp with a recent change in character like the increase in size and ulceration, carcinoma should be suspected [2].

CASE REPORT:

A 65 year old male patient presented to the surgical outpatient clinic with a progressive swelling in the scalp of six years duration with a recent increase in size. A

provisional diagnosis of infected sebaceous cyst was made. The swelling was excised and submitted for histopathological examination. On gross examination, the mass was cystic & covered with skin, measuring 8x7x3cms in size. Cut section revealed a thickened cyst wall with grey yellow material. Microscopic examination showed a well differentiated squamous-cell carcinoma (Fig-1&2) arising in the wall of sebaceous cyst.(Fig-3)

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*Corresponding author: Dr. Pammy sinha

Email: drpsinha@hotmail.com

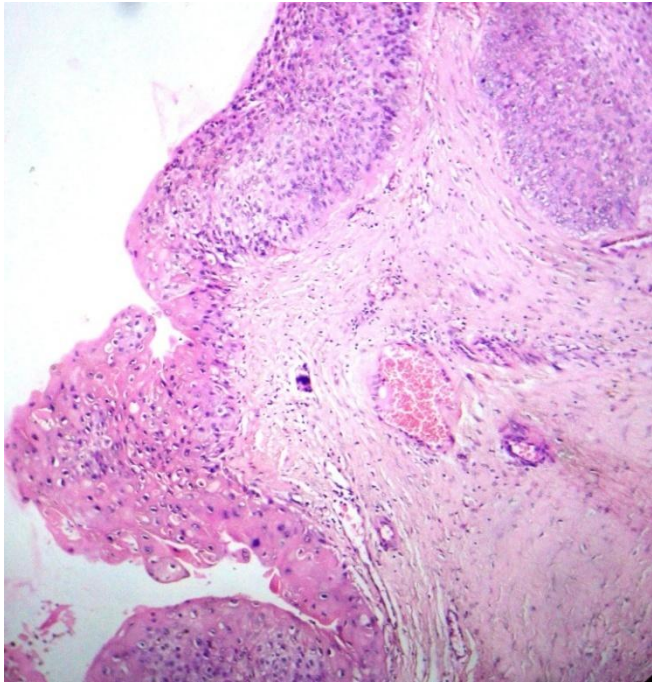


Figure 1: Dysplastic changes in cyst wall. (H&E, 10X)

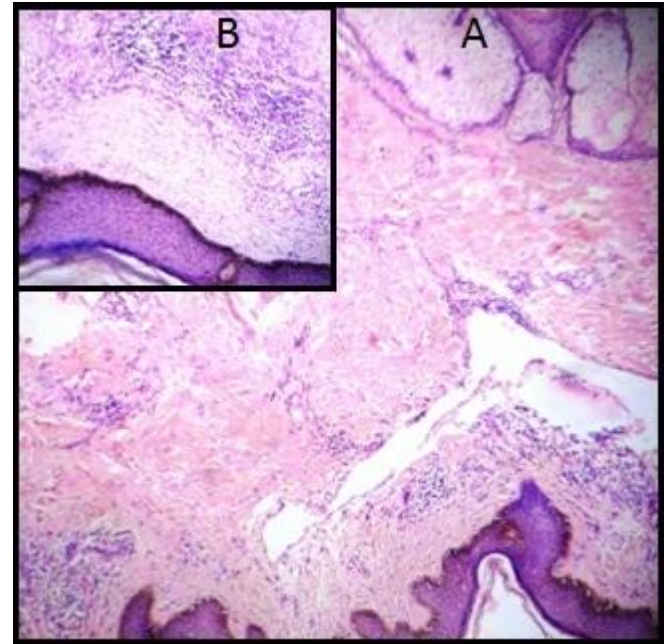


Figure-3: A. Microphotograph showing sebaceous cyst wall lined by stratified squamous epithelium with adnexae in deeper tissue. (H&E, 10X) B. Inset shows Cyst wall with inflammation in deeper tissue (H&E, 10X)

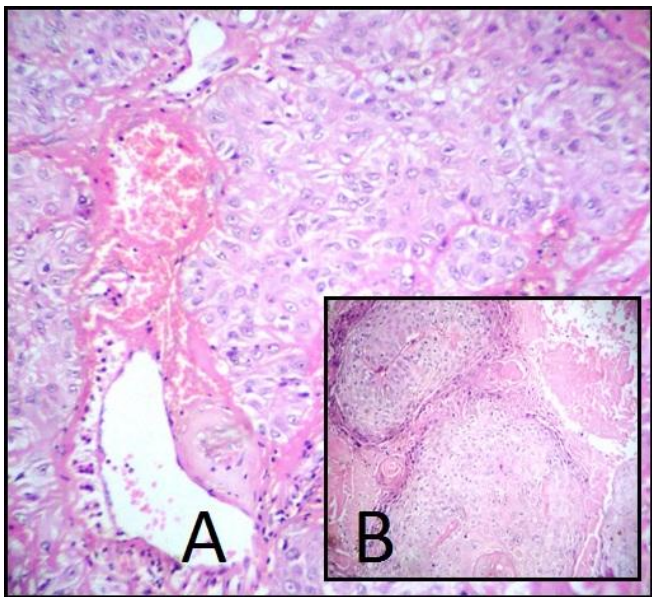


Figure 2: A. Invasive well differentiated squamous cell carcinoma, showing large pleomorphic, anaplastic cell & hyperchromatic nuclei. (H&E, 10X) B. Inset shows Invasive well differentiated squamous cell carcinoma with pearl formation (H&E, 10X)

DISCUSSION:

The commonly diagnosed sebaceous cyst is usually an epidermoid cyst. These are keratin containing lesions, usually seen in young and middle-aged adult that often occurs in relation to the pilosebaceous follicle [3,4]. The occurrence of carcinoma within a sebaceous cyst is of sufficient rarity. The incidence of this change varies from 1.5 to 10 [5,6,7]. The frequency of malignant change in sebaceous cyst is lower when compared to malignant change in dermatoses (20%) [8], hence sebaceous cyst need not be considered as a precancerous lesion. Carcinoma developing in a sebaceous cyst is predominantly of a squamous-cell type, although basal cell growth is found in approximately 15 per cent of cases. Most of the squamous-cell carcinomas are well differentiated and of low grade malignancy with marked keratinization and pearl formation (Fig-2 inset) as seen in our case. Malignant sebaceous cysts are common in the elderly and

91.4 per cent of the lesions are located in the head or neck region.[2,9,10] Adjacent to any sebaceous cyst, occasionally inflammatory reaction (Fig-3 inset) may be seen, which is of some differential value in determining the origin of a carcinoma suspected of arising in a sebaceous cyst. This reaction to the fatty products of the cyst is made of large mononuclear cells and foreign body giant cells [2].

The prognosis in this tumor is good although recurrence may be expected if excision is not adequate, and adequate excision depends on a high degree of suspicion in presumed sebaceous cysts, which demonstrate some of the characteristics emphasized above. Recurrence following excision of a sebaceous cyst should arouse suspicion regarding its possible malignant nature and indicate a further wide excision. It is more important to emphasize the necessity for routine microscopic examination of all sebaceous cysts removed. [2]

CONCLUSION:

In older patients who have had a sebaceous cyst of relatively long duration on the face or scalp, perhaps ulcerated, and in which a recent change in character such as an increase in size has been observed, carcinoma should be suspected. Sebaceous cysts which are suspected of fostering carcinoma should be treated by wide local excision; immediate lymph node dissection is not in general necessary although markedly anaplastic growths may justify such a procedure. With adequate treatment, the prognosis is good. However, if routine histologic examination of all sebaceous cysts removed is not done, adequate treatment of a carcinoma may be delayed and a chance for the cure may be lost.

REFERENCES:

1. Sagi A, Goldstein J, Greber B, Rosenberg L, Ben-meir P. Squamous cell carcinoma arising in sebaceous cyst. *Eur J Plast Surg* 1988; 11:87-8.
2. Peden JC. Carcinoma developing in sebaceous cysts. *Ann. Surg* 1948; 128(6): 1136-47.
3. Machi R.M., Quinn A.G.; Epidermal skin tumours. In Burns T., Breathach S., Cox N; editor, *Rooks textbook of dermatology*, 7th ed oxford Blackwell, 2004 36-42.
4. Wani I, Bhat B, Mir I, Salim T, Rather M, Afsheen M et al. Giant sebaceous cyst of scalp- A case report. *Internet journal of Dermatology* 2008;6: 2.
5. Bishop EL. Epidermoid carcinoma in sebaceous cysts. *Ann Surg* 1931;93(1): 109-112.
6. Stone M. J, Abbey EA. Sebaceous cyst; its importance as a precancerous lesion. *Arch. Dermat. Syph* 1935; 31: 512.
7. Love, William R, Montgomery H: Epithelial cysts. *Arch. Dermat. Syph.* 1943; 47: 185,
8. Montgomery, Hamilton: Precancerous dermatosis and epithelioma in Situ. *Arch. Dermat. Syph* 1939;39: 387.
9. Venus M.R., Elfigani E.A., Fagan J.M., ;Just another sebaceous cyst ?, *Ann & coll Surg Engl*, 2007;89(6);648
10. Collins DC. Carcinoma originating in sebaceous cysts. *Canad M.A.J* 1936; 35 70-2.