



A CASE OF EPIDERMOID INCLUSION CYST IN THE NASAL VESTIBULE

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ABSTRACT

Introduction: Epidermal inclusion cyst are formed due to trauma or they may be congenital. They are unusual in head and neck region. Epidermal inclusion cyst is rare in nasal vestibular region.

Case report: To present a case of Epidermal inclusion cyst in the right nasal vestibular region with no history of trauma. Patient had no allergic symptoms. The swelling was non fluctuant and cystic. All routine investigation normal. The swelling was excised via elliptical incision and sent for histopathological examination. Histopathological finding consistent with epidermal inclusion cyst.

Conclusion: Epidermal inclusion cyst in nasal vestibular region is rare. In the absence of history of trauma, only clinical examination and histopathology will help in diagnosis.

INTRODUCTION

Epidermoid cyst in nasal vestibular region is not common. In the pathogenesis of these lesions, trauma is the usual precipitating factor. They may be congenital due to trapping of ectoderm at time of fusion of neural tube or other epithelial linings. They may also be secondary or acquired due to inclusion of epidermal elements into dermis post trauma or iatrogenic. When seen in head and neck region, such lesions are rare. We present a case of an epidermal inclusion cyst in nasal vestibule without history of trauma or surgery.

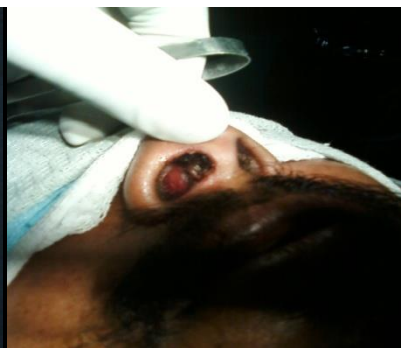
CASE REPORT

A 53year old male patient came with complaints of nasal obstruction in the right side and swelling in the right nasal vestibular region since 6months. He had no allergic symptoms. On examination there were no local signs of any acute inflammation and cutaneous sensations were normal. He was found to have non fluctuant cystic swelling in the right nasal vestibule attached to the lateral wall of the vestibule without any attachment to inferior turbinate. Blood count, ESR and X-ray chest were within in normal limits. The patient underwent excision of the cystic swelling. An elliptical incision was made and the mass was excised in toto. Base of swelling was cauterized with bipolar cautery and primary Wound closure done. The mass contained a thick whitish material .The removed mass was sent for histopathological examination.

Clinical photograph

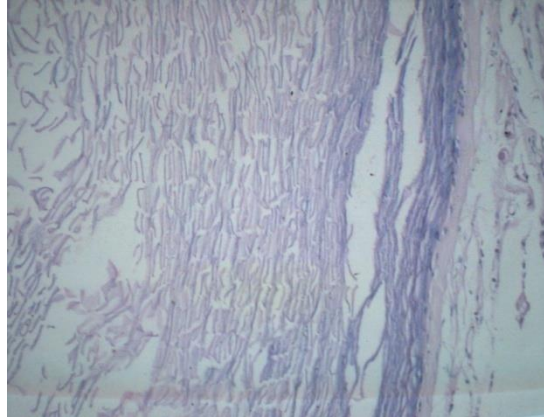


Excised specimen



HISTOPATHOLOGY

Shows features of epidermal inclusion cyst



Photomicrograph showing squamous epithelium of cyst and keratin filaments

DISCUSSION

Different terms are used to describe epidermal cyst. They also called as epidermoid cyst by some. They are not called as sebaceous cyst as they do not have sebaceous element. Epidermal cyst refers to those which are due to implantation of epidermal elements in the dermis. Epidermal inclusion cyst may be congenital or acquired. The congenital forms are due to trapping of ectodermal tissue in line of fusion^{2,3}. This takes place during 3rd to 5th week of gestation. Acquired cyst which are known as epidermal inclusion cyst, arise from inclusion of epidermal structures in the dermis and other deeper tissues after trauma^{2,3,6}. Most accepted theory of etiopathogenesis is epithelial implantation theory^{1,6}. According to which the epidermal elements are pushed into the deeper tissues is the cause of cyst. The trapped epidermis act like a skin graft, starts producing keratin thus forming a cyst.^{1,2,6} The epidermal inclusion cyst are described as a dermal cystic enclosure of keratinizing squamous epithelium that is filled with keratin debris⁵. Epidermal inclusion cyst are secondary to trauma, mainly found in fingers, palms and soles^{1,2}. Epidermal inclusion cyst can also occur in deeper tissue other than dermis, may be secondary to biopsy and surgery^{3,4}. In our case there is no history of trauma.

Clinically the swelling is usually painless, slow growing, well circumscribed. Congenital cause in our case was ruled out due to age of presentation, commonest age of presentation of congenital cyst being first four decades.⁸ Histologically epidermal inclusion cyst have squamous epithelium lining containing keratin debris.⁴ Sometimes show granulomatous foreign body giant cell reaction due to rupture of cyst^{1,9}

Treatment for this lesion is complete excision.

CONCLUSION

Nasal vestibule epidermal inclusion cyst is rare. Most epithelial inclusion cyst has their origin to trauma. The precipitating trauma may be trivial and may be evident only on thorough history. In our case a

congenital cause was ruled out and there was no history of frank trauma but the clinical findings with histopathology points to an epidermal inclusion cyst. Lesion was excised, patient was followed up for six months with no recurrence .Epidermal inclusion cyst can be diagnosed and managed by simple clinical examination and confirmed by histopathological examination.

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