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Research Article

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Forget me not: Epidermal inclusion cyst of the Ear Pinna- A common lesion at unusual location: A case report

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ABSTRACT

Epidermoid cysts are developmental benign cysts which are frequently encountered on location like extremities, scalp, face, rarely on locations like external ear. Very few cases of Epidermal inclusion cysts (EIC) are described in this location and have been reported in literature. The lesion is usually benign but may undergo malignant transformation if left untreated. Therefore timely diagnosis by FNAC is useful and considered necessary for evaluation of such cases. We hereby describe a case of 4 years old male child who was referred to cytopathology department for FNAC for the swelling involving upper part of left side of pinna extending to posterior aspect measuring 3.0 x 2.1 cm in size and was non tender. It was diagnosed as EIC on FNAC and subsequently confirmed on HPE. FNAC is found as useful tool to diagnose such uncommon lesions found at unusual locations.

Key Words: *Epidermal inclusion cyst, Ear pinna, FNAC*

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INTRODUCTION

Pinna is an important part of peripheral auditory canal. It is a delicate, vulnerable structure and is more liable for trauma, so the lesions of pinna are very common. Some of the causes include: increased violence, accidents and high ear piercing [1].

Some of the common lesions encountered in the region of ear pinna include: Epidermal cysts, pseudocysts, vascular tumors, cartilage tumors and skin tumors [2]. Epidermoid cyst is a developmental cyst of head and neck [3], also called as epidermal cyst, keratin cyst, sebaceous cyst or epidermal inclusion cyst [4].

Epidermoid cysts are most common cutaneous cysts, can occur anywhere in the body, but more commonly seen over face, scalp, neck and trunk [5]. Other common locations being ovaries and testicles (80%), cervical and face area (7%) and oral cavity (16%). Auricle/external ear is one of the rare locations [6].

Males are more predisposed in a ratio of 2:1. The common investigations for the diagnosis being sonography, fine needle aspiration cytology (FNAC), histopathology [7]. They are usually benign but rarely they are associated with malignancy [8,9,10].

The objective of our case report is to highlight the occurrence of epidermal inclusion cyst in an uncommon/rare site such an external ear and importance of subjecting the same to histopathological examination.

Case Report:

A 4 year old male child presented in ENT OPD with history of swelling over left ear pinna since 4 months. Swelling was insidious in onset, progressive in nature and painless. Initially the swelling was small but there was an increase in size in last 2 months as shown in Fig 1A and 1B.

On examination, swelling was round to oval, measuring approximately 3x 2 cm in size, on superior aspect of left ear pinna, involving the external ear helix. On palpation, it was non tender, non pulsatile with no local rise in temperature. The swelling was solid to cystic in consistency with regular smooth surface with normal overlying skin. Rest of the external auditory canal and tympanic membrane was normal. No history of ear lobe piercing was given by the patient's parents or relatives.

The FNAC of the patient revealed whitish aspirate and microscopic examination showed keratin debris and few anucleated squames, which were suggestive of Epidermal inclusion cyst; Fig. 2A, 2B and 2C. After counselling, patient was posted for excision of the swelling after obtaining the consent from the patient's parents. Excision of the cyst was done and was sent for histopathological examination.

Histopathology of the lesion revealed cyst lined by stratified squamous epithelium with a granular layer and lumen containing abundant keratin flakes; the findings were suggestive of Epidermal inclusion cyst; Fig. 3A and 3B.

Fig. 1A: Cystic lesion on left external ear (Pinna) – Lateral view

Fig. 1B: Cystic lesion on left external ear (Pinna) – Ap view

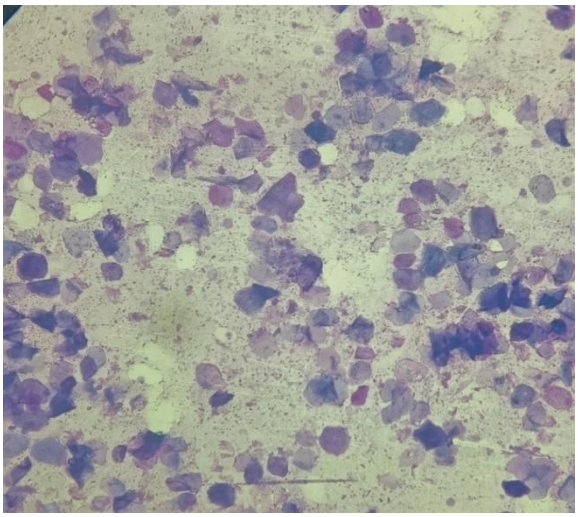

Fig. 2A: FNAC showing keratin debris and few anucleated squames in a necrotic background. (L and G stain; X 100)

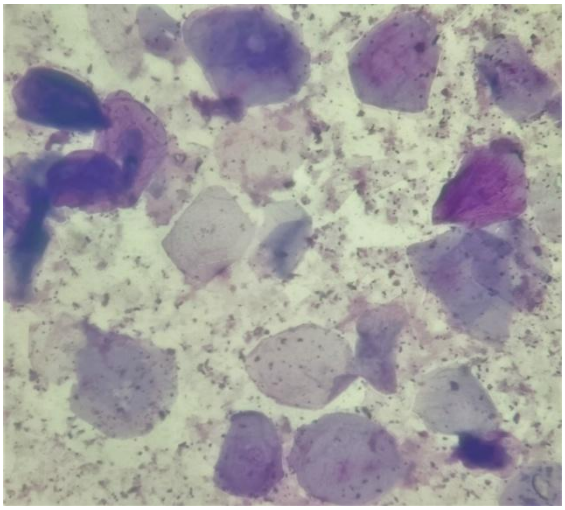

Fig. 2B: FNAC showing keratin debris and few anucleated squames in a necrotic background. (L and G stain; X 400)

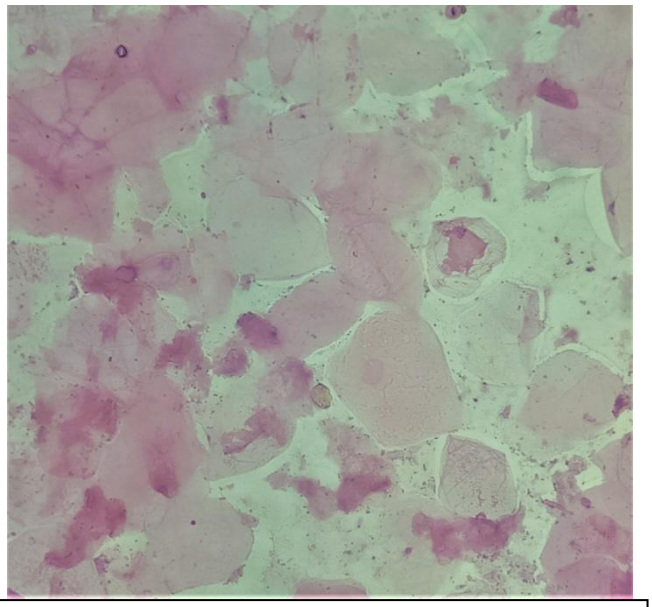

Fig. 2C: FNAC showing keratin debris and few anucleated squames in a necrotic background. (H and E stain; X 400)

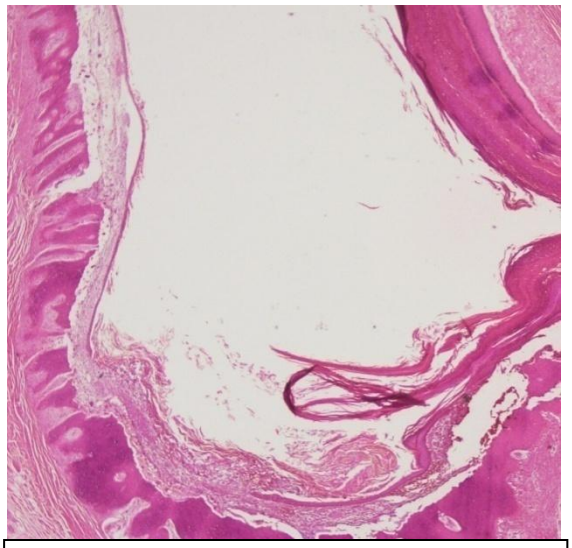

Fig. 3A : Section examined shows cyst lined by stratified squamous epithelium with a granular layer. (H and E stain; X 400)

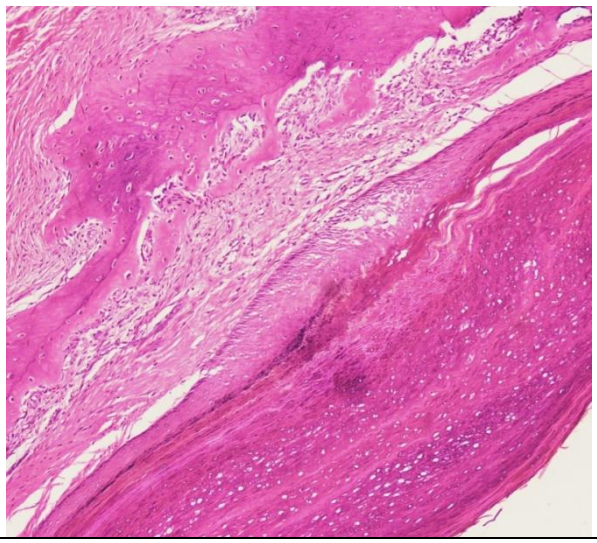

Fig. 3B : Section examined shows cyst lined by stratified squamous epithelium and lumen containing abundant keratin flakes. (H and E stain; X 400)

DISCUSSION

Developmental non odontogenic cyst of head and neck region is Epidermoid cyst and its rare location being ear pinna [11]. Any lesion on ear pinna alters the facial contour drastically [1]. They usually occur in 3rd and 4th decade of life and there is slight male predilection. Common sites being scalp, face, trunk and rare site being external ear [7] and very few cases have been reported in literature [12]. Common differentials of the lesion involving external ear include dermoid cyst, lipomas and hemangiomas [7].

Epidermoid cysts are usually asymptomatic but can get secondarily inflammed [6] or may develop into malignancies like epidermal cyst carcinomas, Bowen's disease, basal cell carcinomas and melanomas [7].

Ikeda et al reported a case in which basal cell carcinoma was originating from epidermoid cyst [13]. Lopez rios et al reported a case in which squamous cell carcinoma was originating from epidermoid cyst [14].

In our case, patient underwent surgical removal and he recovered well with no post surgical complications or signs of recurrence and patient was advised for regular follow up.

CONCLUSION

This case report highlights the occurrence of epidermal inclusion cyst on external ear; pinna which is an unusual site for this lesion, so they can be misdiagnosed sometimes. To ensure the correct diagnosis, cytopathological and histopathological examination is necessary as these lesions may undergo secondarily infected, inflamed or develop a malignant potential. Treatment of choice is surgical excision and recurrence is seldom noted. This is emphasized that use of FNAC does not affect the cosmetic and aesthetic changes and therefore FNAC is considered as a pre -surgical useful investigation.

REFERENCES

1. Honnegowda T, Kumaraswamy NH, Gaur SK(2021). Clinico-Etiological study of benign lesions of pinna and its management. IP J Otorhinolaryngol Allied Sci; 4(1):24-27.
2. Wortsman X, Jemec GB(2006). High-resolution ultrasound applications in dermatology [in Spanish]. Rev Chilena Dermatol; 22:37–45.
3. Shear M(2007). Developmental cyst of head and neck region. Cyst of oral and maxillofacial region Shear. 4 th ed. Oxford: Blackwell Publication; p. 181-3.
4. Rajendran R(2009). Developmental disturbances of oral and para oral Structures. Shafer's textbook of oral pathology. 6 th ed. Elsevier publication a division of Reed Elsevier India private limited Noida(UP); p. 67-9.
5. Handa, U., Kumar, S. and Mohan, H. (2002) Aspiration Cytology of Epidermoid Cyst of Terminal Phalanx. Diagnostic Cytopathology , 26, 266-267.
6. Jayendiran S, Iype JV, Srinivasa V(2019). Epidermoid cyst of earlobe: a common cyst at an uncommon site. Int J Otorhinolaryngol Head Neck Surg; 5:1400-3.
7. Fernandes, V.L.G., De Gouveia Pinto, N.M., Barreto, O., Furtado, J. and Basuroy, S. (2018) Epidermoid Cyst of the Auricle: A Common Cyst at a Rare Site. International Journal of Otol aryngology and Head & Neck Surgery , 7, 344-349.
8. Aloi, F., Tomasini, C. and Pippione, M. (1993) Mycosis Fungoides and Eruptive Epidermoid Cysts: A Unique Response of Follicular and Eccrine Structures Dermatology, 187, 273-277.
9. Barr, R.J., Headley, J.L., Jensen, J.L. and Howell, J.B. (1986) Cutaneous Keratocysts of Navoid Basal Cell Carcinoma Syndrome. Journal of the American Academy of Dermatology , 14, 572-576.
10. Bauer, B. (1979) Carcinoma Arising in a Sebaceous Cyst. Internal Medicine Journal , 156, 174-176.
11. Deshmukh S, Dive AM, Khandekar S, Moharil R(2012). Epidermoid cyst of the outer ear: A case report and review of literature. Indian Journal of Otology. 18(1):34.
12. Perez-Guisado J, Scilleta A, Cabrera-Sanchez E, Rioja LF, Perotta R(2012). Giant earlobe epidermoid cyst. J Cutaneous Aesthetic Surg; 5:38-9.
13. Ikeda I, Ono T(1990). Basal cell carcinoma originating from an epidermoid cyst. J Dermatol; 17:6436.
14. Lopez-Rios F, Rodriguez-Peralto JL, Castana E, Benito A(1999). Squamous cell carcinoma arising in a cutaneous epidermal cyst:a case report and literature review. Am J Dermatopathol; 21:174-7.