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## Case Report

# Unusual site of a common skin lesion - Seborrheic keratosis

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### ABSTRACT

Seborrheic keratosis is common benign cutaneous tumour in the elderly which usually presents as pigmented lesion with stuck on appearance. It is seen on the head and neck region. Ear is an uncommon site for Seborrheic keratosis. Seborrheic keratosis is associated with sun- exposure, HPV and mutations in the FGFR3 and PIK3CA gene, but the pathophysiology is still not very clearly understood. We present a case in 60 years old lady who presented with a dark brown pigmented, cerebriform growth in the concha near the external auditory canal associated with reduced hearing and discharge on and off. Clinical suspicion was keratoacanthoma but the histopathological examination showed irritated and pigmented variant of Seborrheic keratosis. Seborrheic keratosis seldom needs to be treated since most of the patients are asymptomatic and get treated for cosmetic purpose but in this present case the patient was symptomatic, hence the mass was excised.

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## 1. Introduction

Seborrheic keratosis is a common dermatological disorder seen in elderly age group. They are also called as senile wart, brown wart, Seborrheic wart or Seborrheic verruca.<sup>1</sup> These lesions are commonly seen on the head and neck and trunk region but very uncommon in the external auditory canal. Patients usually present with variable sized, sharply demarcated pigmented lesions with stuck on appearance.<sup>2</sup> The pathophysiology of Seborrheic keratosis is still not clear, however role of HPV, older age, ultraviolet light exposure, hormonal factors, internal malignancy, and chronic skin infection are associated with Seborrheic keratosis. Seborrheic keratosis has also been linked with mutations in the fibroblast growth factor receptor 3 (FGFR3) gene and p110  $\alpha$  subunit of phosphoinositide 3-kinase (PIK3CA) oncogene mutations<sup>3,4</sup> Histologically, there are

several variants of Seborrheic keratosis, acanthotic being the most common one.<sup>5</sup> Seborrheic keratosis is a benign tumour which clinically can be mistaken for cutaneous malignancy, hence surgical excision and histopathological examination is needed for accurate diagnosis.<sup>6</sup> Seborrheic keratosis are associated with Lesar- Trelat sign when there are sudden appearance of multiple lesions of Seborrheic keratosis with increase in size. These patients may have an underlying malignancy.<sup>7</sup>

We present a case of a 60 years old lady who presented to the OPD with complaints of a lesion over the right ear near the external auditory canal, in the concha since two and a half years. The lesion started as a small nodule and progressively grew over the past 3 months. It was associated with discharge on and off with reduced hearing in the same ear. No history of ear trauma, any previous ear surgery or any co-morbidity.

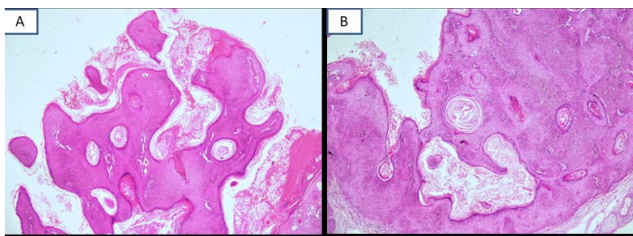
On examination, there was a soft, dark brown to black coloured cerebriform appearing, mulberry growth in the

\* Corresponding author.

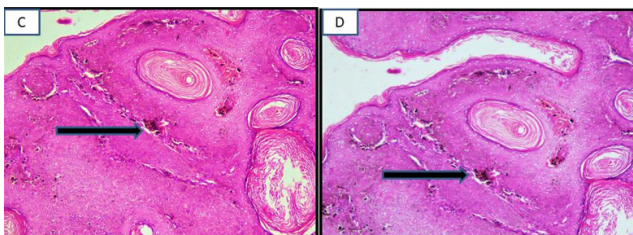
E-mail address: [arnestina@gmail.com](mailto:arnestina@gmail.com) (S. Arnestina).



**Fig. 1:** Photograph of a cutaneous mass in the concha.



**Fig. 2:** Photomicrographs (A&B) show keratinised stratified squamous epithelium revealing hyperkeratosis, parakeratosis, marked acanthosis, papillomatosis downward growth of rete ridges and pseudohorn cysts-irritated variant. Hematoxylin and eosin (100x, 400x)



**Fig. 3:** Photomicrographs (C&D) show pseudohorn cysts with presence of melanin pigment (arrows) – pigmented variant. Hematoxylin and eosin (400x)

external auditory canal; no discharge or bleeding was present at the time of examination. (Figure 1) The mass was surgically excised with 3mm margins and coverage with retroauricular skin flap was done. A flap was created from behind the ear. The flap was transposed through a window in the conchal cartilage and placed over the excised area and fixed with vicryl 3-0. The donor area was closed with ethilone 3.0 and aseptic dressing with paraffin gauze was done. The entire mass was sent for histopathological examination. Clinically, the working diagnosis was Keratoacanthoma.

Grossly we received a skin covered dark brown – black soft tissue mass measuring 2.2x2x 0.5cm. The external surface was corrugated. The entire tissue was subjected to processing. Histopathology examination showed keratinised stratified squamous epithelium revealing hyperkeratosis, parakeratosis, marked acanthosis, papillomatosis and downward growth of rete ridges. Numerous pseudohorn cysts and squamous eddies seen along with increase in melanin pigment. (Figure 2) The dermo-epidermal junction showed increased plasma cells and melanophages. (Figure 3) The histopathological features were consistent with the diagnosis of Seborrheic keratosis (irritated and pigmented type).

## 2. Discussion

Seborrheic keratosis is very common lesion of the skin especially in the elderly age group. These lesions present either singly or multiple and are sharply demarcated, brownish in color and raised. Head and neck are the most affected sites. Histologically, there are six variants of Seborrheic keratosis: irritated, adenoid, plane, clonal, melanoacanthoma, inverted follicular keratosis and benign squamous keratosis. Combination of these variants can be seen in one lesion. The irritated variant shows squamous metaplasia with whorled squamous eddies, parakeratosis in the stratum corneum and occasional reactive atypia whereas the pigmented variant shows increased melanin pigment in the keratinocytes with increased melanophages.<sup>8</sup> In the present case, histopathological examination revealed both irritated and pigmented variant of Seborrheic keratosis as it had all these above findings.

In a study conducted by Roh NK et al in 2016 where 271 skin biopsies of Seborrheic keratosis were included in which the most common site for Seborrheic keratosis was face and neck followed by trunk, ear wasn't seen as the site in their study.<sup>9</sup>

Another retrospective study done by Kim KW et al in 2014 included 7 patients of Seborrheic keratosis in the external auditory canal and auricle which on histology showed acanthotic type in 6 cases and undifferentiated in 1 case.<sup>10</sup>

The literature has very few studies where ear is the site of presentation of Seborrheic keratosis, which makes this a

case a rare presentation.

### 3. Conclusion

Usually no treatment is required for Seborrheic keratosis in the head and neck region, since most of the patients are asymptomatic except for cosmetic purposes. Seborrheic keratosis present in the external auditory canal are rare, but given the fact, Seborrheic keratosis can clinically mimic malignancy, complete excision followed by histopathological examination should always be done with a close follow up.

### 4. Conflict of Interest

None

### 5. Source of Funding


None

### References

1. Jackson JM, Alexis A, Berman B, Berson DS, Taylor S, Weiss JS, et al. Current Understanding of Seborrheic Keratosis: Prevalence, Etiology, Clinical Presentation, Diagnosis, and Management. *J Drugs Dermatol*. 2015;14(10):1119–25.
2. De Loof M, Van Dorpe J, Van Der Meulen J, Lefever S, Dhooge I. Two cases of seborrheic keratosis of the external ear canal: involvement of PIK3CA and FGFR3 genes. *Int J Dermatol*. 2018;57(6):703–6.
3. Velasquez JI, Mahecha AC, Silva JD. Seborrheic keratosis of the external auditory canal. *Otol Neurotol*. 2012;33(7):61–2.
4. Hafner C, Vogt T, Landthaler M, Musebeck J. Somatic FGFR3 and PIK3CA mutations are present in familial seborrheic keratoses. *Br J Dermatol*. 2008;159(1):214–7.
5. Roh NK, Hahn HJ, Lee YW, Choe YB, Ahn KJ. Clinical and Histopathological Investigation of Seborrheic Keratosis. *Ann Dermatol*. 2016;28(2):152–8.
6. Sharma P. Irritated Seborrheic keratosis masquerading as malignancy on 18F-fluorodeoxyglucose positron emission tomography-computed tomography. *World J Nucl Med*. 2021;20(3):309–11.
7. Ebst BD, Minzer-Conzetti K, Swerdlin A, Devere TS. Cutaneous manifestations of internal malignancy. *Curr Probl Surg*. 2010;47(5):384–45.
8. Mansur AT, Yildiz S. A diagnostic challenge: inflamed and pigmented seborrheic keratosis. Clinical, dermoscopic, and histopathological correlation. *Dermatol Online J*. 2019;25(3):13030/qt0w56m5hq.
9. Roh NK, Hahn HJ, Lee YW, Choe YB, Ahn KJ. Clinical and Histopathological Investigation of Seborrheic Keratosis. *Ann Dermatol*. 2016;28(2):152–8.
10. Kim KW, Chang J, Lee S, Im GJ, Chae SW, Jung HH, et al. Clinical analysis of seborrheic keratoses in the ear: a retrospective study and literature review. *Eur Arch Otorhinolaryngol*. 2015;272(5):1113–7.

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