INTRODUCTION

Seborrheic keratoses are common, benign, pigmented epidermal tumors.[1] Many terms such as senile wart, melanoacanthoma, basal cell papilloma, senile keratosis and seborrheic wart have been applied, but seborrheic keratosis is the most widely accepted term.

These usually develop after the age of 50 years although occasionally, seen in young adulthood without any sexual predilection.[1] The common site of involvement includes the trunk, particularly the interscapular area, sides of the neck, the face and the arms. The tumors are not, however, seen on the mucous membranes.[2]

Lesions appear as coin-like, sharply demarcated, exophytic lesions and are “stuck on the skin” with a verrucous, rough, dull or punched-out surface. Flat lesions often have a smooth surface and are scarcely elevated above the surface of the skin.[2]

The etiology is not well-known, although heredity, sunlight and human papilloma virus (HPV) have been suggested as risk factors. Recent genetic studies have suggested that somatic mutations in Fibroblast Growth Factor Receptor 3 (FGFR3) gene are important in the development of these lesions.[3]

Although seborrheic keratosis is a commonly encountered lesion by the dermatologists, the dentist should be able to recognize and diagnose it when it presents in the head and neck region.

CASE REPORT

A 67-year-old Indian female presented with the chief complaint of a painless mass below the left ear since last 15 years.

The lesion showed slow growth and the patient reported no increase in size for past many years.

On clinical evaluation, a single, well-circumscribed brownish black nodular mass was present about 1 cm below the left pinna, near the angle of mandible and just anterior to the sternocleidomastoid muscle [Figure 1]. The pedunculated mass measured about $1 \times 1 \text{ cm}^2$ in size and the overlying skin was rough and fissured with minute nodular surface projections. On palpation, the mass was firm in consistency with no tenderness or discharge.

A clinical diagnosis of epidermal nevus was given and an excisional biopsy was performed and the tissue was sent for histopathological examination.

Gross examination of the excised specimen revealed an oval mass measuring about $0.9 \times 0.8 \times 0.3 \text{ cm}^3$ in size, brownish-black in color and was firm in consistency. The surface of the mass appeared rough and fissured. Cut surface was non-homogenous and rough [Figure 2].

Microscopically, the H/E stained sections exhibited exophytic proliferation of epidermal cells. The lesion exhibited papillomatosis, hyperparakeratinization, acanthosis and deep, keratin-filled invaginations [Figures 3 and 4]. Keratotic invaginations (“pseudohorn cysts”) as well as intraepithelial

Figure 1: Brownish black nodular mass below the pinna
keratin cysts ("true horn cysts") were present [Figures 5-8]. Melanin pigmentation was observed in the basal
layer [Figure 9]. The dermis exhibited collagen fibers, blood vessels and moderate inflammatory infiltrate.

A thorough histopathological evaluation established the diagnosis of seborrheic keratosis, (Acanthotic and Hyperkeratotic type).

**DISCUSSION**

Seborrheic keratoses show a considerable variety of histologic appearances. Often, more than one type may be observed in the same lesion as in the present case.

**Acanthotic type**

This type shows marked acanthosis of predominantly basaloid cells. Moderate papillomatosis and hyperkeratosis are present. Horn invaginations that on cross-sections appear as “pseudo-horn cysts” are numerous. “True horn cysts” are also seen, which show sudden and complete keratinization with a very thin granular layer surrounding it. About one-third of these lesions exhibit melanocytic proliferation and hyperpigmentation. Formation of an in-situ carcinoma within this type, so-called “bowenoid transformation”, is seen occasionally in lesions of sun-exposed areas.

**Hyperkeratotic type**

Pronounced papillomatosis is present in this variant. Acanthosis is mild but shows a verrucous appearance with elongated projections (“church spire” pattern). There is prominent hyperorthokeratosis. While horn cysts and pseudocysts may be seen, they are less common than in the acanthotic form. Hyperpigmentation is unusual in this variant.

**Clonal type**

The hallmark of the clonal (nested) seborrheic keratosis subtype is the proliferation of sharply demarcated intraepithelial nests of basaloid cells. In some cases, the nests are composed of larger cells with conspicuous intercellular bridges, with nests separated by strand of cells with small dark nuclei.

**Reticulated type**

The reticulated (or adenoid) type is characterized by numerous, thin, double rows of basaloid epidermal cells, which extend from the epidermis and show branching and interweaving in the dermis. Hyperpigmentation is relatively common, although “horn cysts” and “pseudocysts” are not. There is clinical and histologic evidence of a relationship between solar lentigo and the reticulated subtype of seborrheic keratosis.

**Irritated type**

Irritated seborrheic keratosis shows a lichenoid inflammatory infiltrate in the dermis and intraepithelial squamous eddies, which are composed of whorling aggregates of eosinophilic squamous cells. In this type, the squamous cells outnumber the basaloid cells. Most eddies appear to show at least one of the morphological features of intraepidermal hair follicle structures. Squamous eddies may be confused with horn pearls of squamous cell carcinoma but can be differentiated from them by their large number, small size and circumscribed configuration.

**Pigmented type**

Any variant can show pigmentation but is often seen within the acanthotic and reticulated subtypes of seborrheic keratosis. Pigment is present mainly within basal keratinocytes, although in melanoacanthoma of skin, a rare type of pigmented
Seborrheic keratosis, a marked increase in melanocytes containing melanin pigment is seen. The pigmented subtype may be clinically confused with other pigmented lesions, such as malignant melanoma, pigmented basal cell carcinoma or melanocytic nevus.[5]

Differential Diagnosis[3,4]

- Epidermal Nevus
- Actinic Keratosis
- Verruca vulgaris
- Acanthosis Nigricans
- Basal Cell Carcinoma
- Melanoma.

CONCLUSION

Seborrheic keratoses are benign lesions. They generally are only of aesthetic concern to the patient. Some lesions may be bothersome because of pruritus and are usually treated for this reason. It may clinically mimic a malignant tumor, thus they are usually biopsied to exclude other tumors. The sign of Leser–Trélat (LT) is the sudden eruption of multiple seborrheic keratoses or increase in the number and size of existing seborrheic keratoses, associated with an underlying malignancy. Thus, patients should be carefully followed up and investigations repeated, especially if the sign progress and/or become more florid.

REFERENCES

1. Girisha BS, Kamath D, Shrinath P, Harish PS. Seborrheic keratosis; A rare case of conductive deafness. JCDR 2012;6:913-4.
2. Rajabi P, Adibi N, Nematollah P, Heidarpour M, Eftekhari M, Siadat HA. Bowenoid transformation in seborrheic keratosis: A retrospective analysis of 429 patients. J Res Med Sci 2012;217-21.
3. Neville BW, Damn DD, Allen CM, Bouquot JE. Oral and Maxillofacial Pathology. 3rd ed. Philadelphia: Elsevier; 2009.p. 374-375.
4. Elder DE. Lever’s histopathology of the skin. 10th ed. Philadelphia: Lipincott; 2009.p. 795-798.
5. Busam KJ. Dermatopathology: A volume in the series foundation in diagnostic pathology. 1st ed. Philadelphia: Elsevier; 2010.p. 336-343.

How to cite this article: Phulari RG, Buddhdev K, Rathore R, Patel S. Seborrheic keratosis. J Oral Maxillofac Pathol 2014;18:327-30.
Source of Support: Nil. Conflict of Interest: None declared.