



Treatment of Irritated Seborrheic Keratosis of External Auditory Canal (EAC)

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Abstract

Injuries to the external auditory canal (EAC) are usually assessed by the specialist in Otorhinolaryngology. The main differential diagnosis is made with malignant lesions and cholesteatoma of the EAC. However, we found benign skin lesions such as seborrheic keratoses; although they are extremely rare at this level, frequently seen in the elderly, and severely affect the trunk, head and neck [1-4].

We present the case of a 65-year-old patient who consults for Emergency Service for sensation of hearing loss, otorrhagia, and fetid otorrhea. Among his medical history, he underwent surgery 7 years ago due to a EAC injury to the same ear. The diagnosis was irritated seborrheic keratosis.

Given the evolution over time, a biopsy of the reddish-violet lesion of a friable and bleeding consistency that completely occluded the lumen of the duct was performed.

Computerized axial tomography (CT) was requested to rule out bone erosion and infiltration, and topical treatment was prescribed.

We have found six cases in the English literature about the histopathology of seborrheic keratosis in its irritated form, however, the therapeutic management of this type of lesions has not been well described.

Keywords: Seborrheic Keratosis; Ear Canal; Irritated Seborrheic Keratosis

Introduction

Seborrheic keratosis is often an incidental finding. Its pathogenesis is not fully established. The main risk factors described are advanced age, exposure to ultraviolet light, human papilloma virus (HPV) infection, the fibroblast growth factor receptor 3 (FGFR3) gene and the p110 α subunit of oncogenic mutations of phosphoinositide 3-kinase (PIK3CA) [2].

In the literature reviewed, the location at the skin level of the external auditory canal is quite rare and we have found a total of eighteen cases of seborrheic keratosis of the EAC. The treatment described consists of excision of the lesion for histopathological

confirmation to rule out malignancy. However, we must know, that it is a recurrent injury, therefore we must make sure to perform a technique that eliminates the affected skin region [3-6].

With this work, we want to show in detail the surgical technique performed for the treatment of irritated seborrheic keratosis.

Case Study

We present the case of a 65-year-old patient who consults for Emergency Service for sensation of hearing loss, otorrhagia and fetid otorrhea. Among his medical history, he underwent surgery 7 years ago due to a EAC injury to the same ear. The diagnosis was irritated seborrheic keratosis.

A biopsy of the reddish-violet lesion was taken at first and a Computerized axial tomography (CT) was requested to rule out bone erosion and infiltration and topical treatment was prescribed with ciprofloxacin and topical corticosteroids during 2 weeks.

After this time, clinical improvement and CT results ruled out bone erosion, describing a soft tissue mass occupying the EAC with an intact tympanic membrane, suggesting a cholesteatoma of EAC or keratosis obturans as a presumptive diagnosis.

Biopsy suggests the diagnosis of irritated seborrheic keratosis. Given this, a new biopsy was decided for a second diagnostic confirmation of irritated seborrheic keratosis and planning of the surgical technique. Meanwhile, topical treatment was prescribed for the clinical improvement.



Figure 1: Lesion in the EAC.

Results

The surgery was performed under general anesthesia. Firstly, infiltration of the EAC with anesthesia (lidocaine 2% + epinephrine 1: 50,000). For the surgical approach, Shambaugh endaural incision (Figure 2) for better exposure of the EAC.

After, the lesion was removed with an electric scalpel and cold dissection with scissors and beales elevator. The resection included the affected skin, leaving the bone exposed and sufficient free margin of the lesion to avoid recurrences (Figure 3).

Temporal fascia was obtained for closure and repair of the de-epithelialized area and the skin edges were approached for second intention healing. We performed a meatoplasty, removing part of the shell, to obtain a skin flap to approximate the edges.



Figure 2: Infiltration of the EAC. We can see the surgical incision line marked in blue.

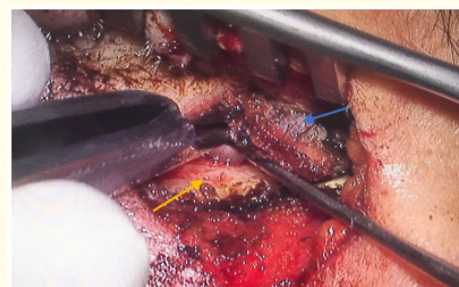


Figure 3: Resection of the lesion (blue arrow). Skin resection affects leaving the bone exposed (yellow arrow). In the background, the undamaged tympanic membrane is observed.

In case of further skin loss, the skin graft option obtained with dermatome was considered, but it finally it was not necessary.

To aid the re-epithelialization and healing process, a rolled silicone sheet was placed in the EAC and an otic plugging was left with Meroceel (Figure 4).



Figure 4: Meroceel[®] introduced in EAC. Wrapping it, a rolled silicone sheet.

The patient remained hospitalized for 24 hours. The removal of the otic plugging was performed at 7 days after surgery and the Silastic sheet was extracted 14 days after the surgery.

As medical treatment, regular pain medication and antibiotic drops with ciprofloxacin were prescribed during 14 days.

We make available the full video of the surgical technique used for resection of recurrent irritated seborrheic keratosis.

Conclusion

Irritated seborrheic keratosis is a rare histologic modality within seborrheic keratoses. Furthermore, it is added that at the EAC level these are extremely rare injuries. Although considered a benign lesion, it should be considered in the differential diagnosis of a mass in the external auditory canal. Its excision is necessary for the definitive diagnosis. In addition, it is observed that the lesions reappear after a prolonged disease-free interval, therefore we emphasize the importance of long-term follow-up of the patients, since their pathogenesis is unknown.

In the reviewed literature we did not find a consensus regarding the surgical technique used. With this work we expose our experience in the management of these infrequent injuries.

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