Case Report

**Basal cell papilloma of the external auditory canal: a case report**

*Khairullah Anuar*

Department of Otorhinolaryngology, Faculty of Medicine and Health Sciences Universiti Sains Islam Malaysia, Malaysia

Received: 30 March 2021  
Revised: 30 May 2021  
Accepted: 05 June 2021

*Correspondence:* Dr. Khairullah Anuar,  
E-mail: drkhairul@usim.edu.my

**ABSTRACT**

Basal cell papilloma are benign neoplastic lesion affecting skin, oral mucosa, trunk and genital organs. However it is uncommon to originate in the external auditory canal. We present a 32-year old female presented with otalgia, reduced hearing and bleeding intermittently from the left ear. Clinically it showed multilobulated, blackish mass obliterating the external auditory canal. The mass was friable and bleed to touch. Excision biopsy was done under general anaesthesia and she had uneventful recovery. The histopathology reported as seborrhoeic keratosis or basal cell papilloma. No dysplasia or malignancy seen. In conclusion, basal cell papilloma of the external auditory canal is rare and complete excision of the lesion ensures good outcome and recovery.

**Keywords:** Basal cell papilloma, External auditory canal, Otalgia, Ear bleed

**INTRODUCTION**

Basal cell papillomas (BCP) is also known as seborrhoeic keratosis. It arises from keratinocytes and classified as non-cancerous benign skin growth. The morphology can be varied. Commonly areas that are expose to sunlight are prone to get it for example face, scalp and trunk. Apart from the skin, other affected areas include upper aerodigestive tract, oral mucosa and genital organs.

It is believed that the human papilloma virus (HPV) is also an etiological factor of papillomas; thus, they are also called viral warts. Cutaneous basal cell papilloma are a very common skin condition; however, basal cell papilloma involving the ear and especially the external auditory canal (EAC) are rarely reported in the literature.

The diagnosis of BCP relies on biopsy and histopathological assessment. Here, we present a case of EAC BCP and its management.

**CASE REPORT**

A 32-year old female complaining for more than 3 weeks history of otalgia, reduce hearing and bleeding intermittently from the left ear. Clinically on otoscopy examination showed multilobulated, blackish mass obliterating the external auditory canal. It was situated at the cartilaginous part of the external auditory canal. The mass was friable, bleed to touch and the attachment was from the posterior wall of the external auditory canal. The patient undergone excision biopsy under general anaesthesia and had uneventful recovery.

The microscopic histological description showed an elevated nodule, composed of proliferation of basal cell forming sheets and trabeculae with hyperkeratosis and horn cyst. Melanin pigments are seen in some of the epithelial cells. No viral inclusion, mitosis or evidence of malignancy seen. The stroma is infiltrated by lymphocytes and plasma cells. The histopathology reported as

DOI: https://dx.doi.org/10.18203/issn.2454-5929.ijohns20212464
seborrhoeic keratosis or BCP. No dysplasia or malignancy seen.

**DISCUSSION**

BCP are frequently found in head and neck region. However, BCP of the external ear rarely occurs. EAC BCP has a low risk of bony dehiscence and generally solitary in nature. The lesion were slow in growth and remain asymptomatic until accidentally discovered by patient or becoming symptomatic such as bleeding or may cause a mechanical obstruction of the EAC, leading to pressure necrosis of the adjacent bone or conductive hearing impairments.\(^3\) The tympanic membrane is seldom involved.\(^4,5\) Viral warts of the skin are harmless and usually go resolve without any treatment however, the possibility of spontaneous resolution of EAC BCP is uncertain.\(^5\) The skin warts HPV (types 1, 2, 3, 4, 27 and 57) which is common causative HPV types are not similar from that in EAC BCP (types 6 and 11); the behaviors may be different with distinct HPV types. Although EAC BCP which caused by HPV types 6 and 11 are generally “low-risk” HPV types, malignant transformation has been reported.\(^6\)

Treatment varies in EAC BCP from trichloroacetic acid, cryosurgery, electrodesication and carbon dioxide laser but as it may be confused with malignant melanoma or squamous cell carcinoma, complete surgical removal of the lesion remains the most effective method in the treatment of EAC BCP.\(^8\) The possible complication of surgery include scarring and EAC stenosis. Silastic tube insertion in the canal as a stent and meticulous postoperative care would minimize the possibility of wound infection and prevent complication.\(^9\)

**CONCLUSION**

BCP of the external ear canal are benign lesion and are rare. Histopathological diagnosis is essential to rule out malignant tumour. Careful examination and complete excision of the lesion ensures good outcome in the treatment.

**Funding:** No funding sources  
**Conflict of interest:** None declared  
**Ethical approval:** Not required

**REFERENCES**

1. Rashmi GH Phulari, Khushbu B. Seborrhoiec Keratosis. J Oral Maxillofac Pathol. 2014;18(2):3327-30.  
2. Xia MY, Zhu WY, Lu JY, Lu Q, Chen L. Ultrastructure and human papillomavirus DNA in papillomatosis of external auditory canal. Int J Dermatol. 1996;35:337-9.  
3. Kim J, Lee DH, Cho KJ, Lee SY. Huge verruca vulgaris (wart) of the external auditory canal. Otolaryngol Head Neck Surg. 2008;139:865-6.  
4. Rogers KA, Snow JB. Squamous cell papilloma of the external auditory canal and middle ear treated with radiation therapy. Laryngoscope. 1968;78:2183-8.  
5. Welsh RL, Gluckman JL. Dissemination of squamous papilloma by surgical manipulation: a case report. Laryngoscope. 1984;94:1568-70.  
6. Kwok CS, Gibbs S, Bennett C, Holland R, Abbott R. Topical treatments for cutaneous warts. Cochrane Database Syst Rev. 2012;9:CD001781.  
7. Miah MS, Crawford M, White SJ, Hussain SS. Malignant transformation from benign papillomatosis of the external auditory canal. Otol Neurotol. 2012;33:643-7.  
8. Blair RL, Irani BS, Low C. Aural papillomatosis--treatment with the carbon dioxide laser. J Laryngol Otol. 1998;112:565-6.  
9. Yadav SP, Chanda R, Goyal N, Chanda S. Aural papillomatosis in a 3-year-old child. Int J Pediatr Otorhinolaryngol. 2002;66:185-7.

Cite this article as: Anuar K. Basal cell papiloma of the external auditory canal: a case report. Int J Otorhinolaryngol Head Neck Surg 2021;7:1205-6.