

Auricle Giant Papilloma in a 32 Years Old Indonesian Male: A Case Report

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ABSTRACT

Head and neck squamous papilloma usually occur in the skin, oral mucosa and upper part of aerodigestive tract. Auricle giant papilloma is uncommon cases worldwide. We report a thirty-two years old Indonesian male seen with auricle giant black mass at our hospital, in Bogor. In this case, mass excision surgery was performed, and the skin defect is closed using a Postauricular Helix-based Adipodermal-pedicle Turnover (PHAT) Flap. Diagnosis was mainly through histopathology examination and in this case, follow up revealed no recurrence.

Keywords: Giant Papilloma, Auricle, Excision, PHAT flap.

1. INTRODUCTION

Squamous papilloma is also known as viral warts. It caused by the human papilloma virus (HPV), a Papovaviridae family classified as DNA virus [1,2] The infections of HPV are associated with common warts, oral or vulvar papilloma, keratoacanthoma, epidermoplasia verruciformis, etc. In the area of head and neck, it could occur in the skin, oral mucosa and upper part of aerodigestive tract [2]

Ear papillomas are uncommon and are usually associated with low-risk HPV types 6 and 11 [2]. It appearance is not associated with age or sex [2] and the proper way of transmission to the external ear canal is remain unclear. The source may from contaminated fingers or objects. The sexual contact or vaginal delivery is uncommon. The major symptoms especially itching and a fullness sensation in the ear [1]. However, the majority of the cases occurs asymptomatic. Recently, several options on the treatment including excision, cryotherapy, curettage, application of topical anti-viral agents, radiation therapy and laser treatments [3].

In this report, author present a clinical case of a giant squamous papilloma in the auricle that closed the external auditory canal. Author also perform a review analysis regarding the diagnosis, natural course and treatment options for external auditory canal papillomas.

2. CASE REPORT

A thirty-two years old male came with a painless mass. It dimensions approximately 3x2x2 cm in the left auricle for 10 years. The growth is slow and there is no other complaint such as otorrhea, hearing impairment, vertigo or tinnitus. He denied any medication for his complaint. He come to the hospital due to the mass was gradually protruding through the canal.

During the physical examination, no abnormality on the vital signs were found. Local status found a cauliflower mass with a pedicle attached to the concha cymba of the left ear canal (Figure 1). The opposite ear, as well as nose and throat within normal limit.



Figure 1 Brown-black cauliflower mass with a pedicle attached to the concha cymba.

A clinical diagnosis of this case is a left auricular giant papilloma. This patient is plan to an excision and reconstruction under general anesthesia. The excision defect after removal of the mass is seen in Figure 2.



Figure 2. The excision defect after mass removal



Figure 3. Excised specimen.

The excised specimen (Figure 3) then immediately placed in a specimen bottle containing 10% neutral-buffered formalin and send to the laboratory. Histology works up revealed the papillomatous complex with a squamous epithelial. On the subepithel, consists of connective tissue and solid keratin masses. There is no evidence of malignancy. Followed up for the past three months revealed a normal left ear canal.



Figure 4. PHAT flap reconstruction

Wide skin defects in the concha cyma area were reconstructed using the PHAT flap method (Figure 4). The flap showed an excellent growth and successfully closed the defect (Figure 5).



Figure 5. The final result 3 weeks after surgery

3. DISCUSSION

There are many tumor-like lesions could occur in the external auditory canal. It including granulomas, epidermoid cholesteatoma, papillomas, osteomas, fibrous dysplasia, and malignancies [4].

Papillomas were a benign exophytic proliferations that occur occasionally in the external auditory canal. Previous reports found that papilloma could also occurs in the middle ear [4-6].

Papillomas were widely known has a correlation with the Human Papilloma Virus (HPV). HPV is a DNA virus with double-stranded circular DNA genome. Papilloma in the ear canal was commonly associated HPV types 6 [7].

Squamous papillomas in the external auditory canal were uncommon. A limited reported in English literature were found, even though, some authors have described it as a frequent disease in the southern Chinese [2].

According to the epidemiologic studies, the transmission of HPV infection mainly associated to the development of genital warts and uterine cervical cancer. The route is through the sexual transmission [8-10]. This transmission route may correlate with oral and pharyngeal warts [11,12]. On the other hand, the proper way of transmission on external ear canal papillomas was remain unknown. The possibility of direct transmission through vaginal delivery or sexual contact to the ear canal is very low. It may be transmitted from the use of contaminated fingers or certain instruments such as ear picking tools [2]. Chang et al, stated that the high incidence in Southern China was correlated with the cultural ritual of mechanical cleansing the ear with unsterilized, and re-used instruments. Through this pathways, infectious agent may inoculate [3]. Other reports claimed that an external auditory papilloma occurs as a result of surgical manipulation that promote the dissemination of squamous papilloma [13]

Squamous papilloma typically presents as a single pedunculated mass with several finger-like projections on the surface. The type of projections could be long and sharp or short and rounded depend on the keratin built-up. According to histology characteristics, papilloma vegetate from stratified squamous epithelium. This growth is characterized by the multiple papillary fronds, hyperkeratosis, parakeratosis, acanthosis, low mitosis and rare nuclear atypia [2].

Papilloma may accompany by symptoms such as itching and a fullness sensation in the ear, however, it could also asymptomatic [1]. A fixed diagnosis should be made by biopsy and continued by histopathological analysis. The majority of benign squamous papillomas in the external ear have a favorable result with no recurrences. However, previous reported that some cases were developed to malignant transformation [14].

The main treatment option in this cases were surgical excision [2,3,15,16]. The other treatment option have

been proposed, including electrodesiccation, carbon dioxide lasers cryosurgery, and radiotherapy [5]. Several complications may arise regarding the surgical excision, but the incidence is rare. The noticeable complication includes scar formation which may lead to the external auditory canal stenosis [3].

The PHAT flap has widely used to reconstruction surgery defect on auricle. This method is simple and only need one step [17]. This case was successfully closed the defect with this method.

4. CONCLUSION

In conclusion, the surgeon should consider squamous papilloma in a patient with cauliflower ear. In order to reconstruction the defects of the anterior part of the ear, postauricular flaps such as Postauricular Helix-based Adipodermal-pedicle Turnover (PHAT) flap can be used. This method is easy to do and the results are quite good

ETHICAL CONSIDERATION

Author declared that they have no conflict of interest. The patient has given a written agreement to publish this case in the journal.

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