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Case Report

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Pilomatricoma in the pinna: a case report

C. J. Timna[1]*, D. Chandrika[2]

Department of ENT, [1]Sanjeevani Multispeciality Hospital, Kollakadavu, Chengannur, Kerala, [2]Akshya Hospital, Harihar, Davangere, Karnataka, India

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***Correspondence:**
Dr. C. J. Timna,
E-mail: jdrtimna@yahoo.com

ABSTRACT

Benign calcifying epithelioma of Malherbe or pilomatricoma is rare benign skin tumours, typically seen in head and neck region. This is supposed to arise from hair follicle matrix cells. Though head and neck is the commonest area involved by this tumour, only 4.5% cases have been reported in the pinna. Neck is most commonly involved followed by cheek, scalp, pre auricular and peri orbital areas. Here we report a case of pilomatricoma over medial surface of pinna in a 20 years old female. She had the swelling which was gradually increasing for the past 5 years. Histopathological examination following excision biopsy confirmed the diagnosis.

Keywords: Pilomatricoma, Head and neck region

INTRODUCTION

Pilomatricoma, previously known as pilomatrixoma is a rare benign neoplasm of hair follicle origin. It was initially thought to arise from the sebaceous glands and was called calcifying epithelioma of Malherbe in 1880.[1] In 1961, fortis and hering named it as pilomatrixoma and described its origin from hair follicle matrix cells.[2] In 1977 name again changed to pilomatricoma. Its incidence is 0.12% among all the cutaneous neoplasms.[3] Most common site of origin is head and neck region (40-77%).[4]

Generally it's a benign solitary hard subcutaneous, slowly growing mass lesion. There are 2 physical examination signs described for pilomatricoma. TENT Sign - Flattening of a portion or whole surface with angulation. Teeter Totter Sign - Pressing on one side raises the other side. Histopathological examination shows islands of enucleated unstained ghost or shadow cells in the centre and nucleated basophilic cells in the periphery. Calcification is seen in ghost cell region.[4]

The treatment of choice is complete surgical excision. Recurrence is rare with incidence of 0-3%.[4] Overlying skin also needs to be excised due to tumour adherence to the dermis.[5]

CASE REPORT

This is a case report of a 20 years old female patient with history of swelling over the medial aspect of pinna for the past 5 years. Initially was small in size which had gradually increased to the present size. There is history of pus discharge from the swelling occasionally. No history of pain in the swelling.

On examination, 0.5×0.5 cm size swelling noted over the antihelix of left pinna, non tender, with rough corrugated surface. Swelling was excised along with overlying skin and sent for histopathological examination.

Microscopic section showed solid nests of basaloid cells having prominent nucleoli, with abrupt trichilemmal type of keratinisation in the periphery. Anucleate squamous

cells (ghost cells) along with areas of calcification and foreign body giant cells seen towards the centre. All these features were suggestive of pilomatricoma.

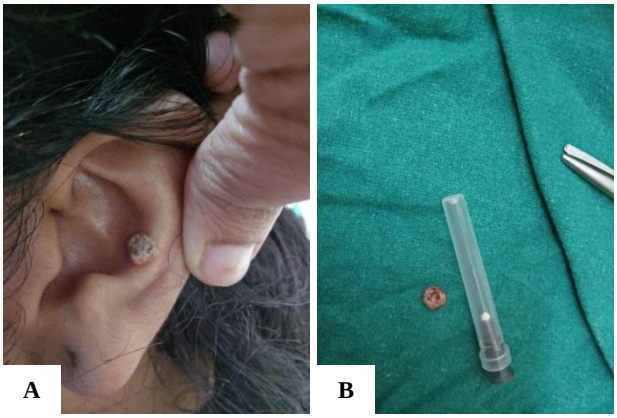

Figure 1: (A) Pilomatricoma over pinna; (B) pilomatricoma, post excision.

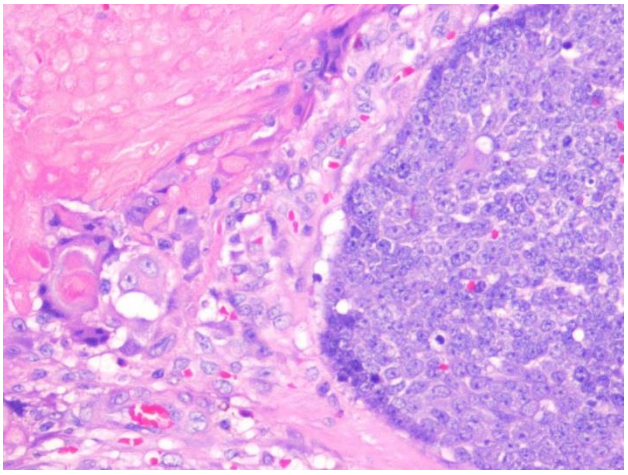

Figure 2: Histopathology of pilomatricoma.

Patient was followed up over 6 months and no recurrence was noted and the excision site healed well.

DISCUSSION

Pilomatricoma is an uncommon lesion that arises from the matrix cells at the base of the hair. Pilomatricoma has been reported not only as a benign lesion or as a low grade malignant lesion with a tendency to recur locally but also as a highly malignant tumour.

Over 50% of cases pilomatricoma is seen in head and neck region with a female predominance. A very few cases have been reported in pinna. Other areas affected are upper limb, trunk, lower limb. No cases have been reported in palms, soles or genital region. The present study was based on a 20years old female with pilomatricoma over left pinna. Bimodal age group is affected. 40% of cases are occurring in patients <10% and 60% of cases occur in >60 years.

Although pilomatricoma is an uncommon benign tumour, they appear as asymptomatic, firm, non tender subcutaneous masses adherent to the overlying skin, but not fixed to the underlying tissues. Although they grow slowly, some of them shows rapid growth and may resemble keratoacanthoma.[6]

Macroscopically – firm to hard calcified greyish white masses. Multiple lesions are rare, seen in 2 to 10% of patients, and have been associated with Gardner syndrome and myotonic dystrophy and sarcoidosis. Histopathologically dermal nodules surrounded by a capsule of compressed fibrous tissue located in the lower dermis and extending into subcutaneous fat. Nucleated basaloid cells are located in the periphery and and with enucleated ghost cells present in the centre. Basaloid cells have small uniform nucleus, scanty cytoplasm and indistinct cell borders. Ghost cells evolve from basaloid cells and represent dead cells which retain their shape. Calcification is seen in ghost cell regions.[7] In the present case, patient had a 0.5*0.5 cm greyish white swelling with corrugated rough surface.

Treatment of choice of pilomatricoma is complete excision with overlying skin because of tumour adherence to dermis. Recurrence is rare (0-3%). Malignant transformation is seen in local recurrence cases.[8] In the present reported case, no recurrence was seen after 6 months of follow up after complete excision.

CONCLUSION

Pilomatricoma is a benign tumour, which is asymptomatic, extremely slowly growing tumour which is common in head and neck area with a least tendency to recur and to turn malignant after complete excision.

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REFERENCES

1. Lan MY, Lan MC, Ho CY, et al. Pilomatricoma of the head and neck retrospective review of 179 cases. Arch Otolaryngol Head Neck Surg. 2003;129(12):1327-30.
2. Malherbe A, Chenantais J. Note sur l'epithelioma calcifie des glandes sebacees. Progres Med. 1880;8:826-37.
3. Moehlenbeck FW. Pilomatrixoma (calcifying epithelioma). A statistical study. Arch Dermatol. 1973;108:532–4.
4. Julian CG, Bowers PW. A clinical review of 209 pilomatricomas. J Am Acad Dermatol. 1998;39:191–5.
5. Graham JL, Merwin CF. The tent sign of pilomatricoma. Cutis. 1978;22:577–80.
6. Yencha MW. Head and neck pilomatricoma in the pediatric age group: a retrospective study and

literature review. Int J Pediatr Otorhinolaryngol. 2001;57:123–8.
7. Kumar VR, Ranjan SD, Kumar SK, Rao RM, Rao ES. Calcifying epithelioma of Malherbe in the pinna. J Evol Med Dental Sci. 2013;2(45):8845-8.
8. Rajeshwary A, Somayaji G, Manohar S. Pilomatricoma of the pinna. Ear Nose Throat J. 2013;92(1):34-40.

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