SAR Journal of Medical Case Reports

Abbreviated Key Title: *SAR J Med Case Rep*
Home page: https://sarpublication.com/journal/sarjmcr/home
DOI: https://doi.org/10.36346/sarjmcr.2026.v07i02.002

ISSN 2707-7780 (P)
ISSN 2709-6947 (O)

Case Report

Proliferating Pilar Tumor of the Cheek in a 60 Year Old Female- A Case Report

Dr. Amna Khan[1], Dr Rashda Shabbir[2], Aiman Masood[3], Mirha Imran Khan[3], Sehar Saleem[3], Mishal Rizwan[3], Jawad Ahmad[3], Minahil Saeed[3], Ayesha Faisal[3], Dr Huzafa Ali[3*]

[1]Department of Oncology, Nishtar Cancer Center, Multan
[2]Assistant Professor Pathology (Microbiology), CMH Institute of Medical Sciences, Multan
[3]CMH Institute of Medical Sciences, Multan

***Corresponding Author:** Dr Huzafa Ali
CMH Institute of Medical Sciences, Multan

Article History: | Received: 20.02.2026 | Accepted: 14.04.2026 | Published: 16.04.2026 |

Abstract: Proliferating pilar tumors (PPTs) are rare neoplasms arising from the outer root sheath of hair follicles, with approximately 90% occurring on the scalp. These tumors predominantly affect women over 50 years of age and may occasionally undergo malignant transformation, necessitating careful histopathological evaluation. We present the case of a 60-year-old female who presented with a gradually enlarging, non-tender lump on the right cheek of 1.5 years' duration. Local examination revealed a firm, 3×2 cm solid mass with no overlying skin changes or palpable cervical lymphadenopathy. Excisional biopsy was performed and histopathological analysis demonstrated a lobulated lesion composed of proliferative squamous cells with hyperchromatic nuclei, brisk mitotic activity, and abrupt keratinization — findings consistent with a proliferating pilar tumor. Post-operative MRI of the head, face, and neck with contrast revealed no evidence of residual or recurrent tumor. This case highlights an uncommon presentation of PPT on the cheek, a site rarely reported in the literature.

Keywords: Proliferating Pilar Tumor, Trichilemmal Cyst, Facial Neoplasm, Squamous Cell Carcinoma, Histopathology.

INTRODUCTION

Proliferating pilar tumor (PPT) also known as trichilemmal tumors [1], is a rare, benign, exophytic tumor that may proliferate from a preexisting trichilemmal cyst [2]. They are more commonly observed in women over the age of 40 with more than almost 90% of cases located on the scalp [3]. Rarely, PPTs may differentiate into a malignant neoplasm, with the possibility of metastasis [2]. Wide local excision is the standard of care due to the potential for recurrence and risk of malignant transformation [2]. As these tumors have the potential to grow large and can lead to a significant surgical defect, the use of excision with margin control, such as Slow Mohs micrographic surgery technique, has the potential to be tissue-sparing. The differential diagnosis has to be quite clear between a growing pilar tumor and squamous cell carcinoma (SCC) because of the similarities in the location and appearance of both malignancies. Based on their biological characteristics, proliferating pilar tumors have been divided into three groups: benign, low-grade malignancies, and high-grade malignancies [1].

CASE PRESENTATION

A 60-year-old female, presented in the oncology outdoor department with the complaint of a gradually increasing size of a lump on right cheek from past 1.5 years. The local examination concluded a non-tender, non- fluctuant and non-illuminant solid lump of 3×2cm, which was firm in consistency with no overlying skin changes and palpable cervical lymph nodes. Visual examination revealed decreased vision of right eye, which was myopic with a visual acuity of 4/6. Left eye had normal vision. Apart from senile scleral plaques rest

Citation: Amna Khan, Rashda Shabbir, Aiman Masood, Mirha Imran Khan, Sehar Saleem, Mishal Rizwan, Jawad Ahmad, Minahil Saeed, Ayesha Faisal, Huzafa Ali (2026). Proliferating Pilar Tumor of the Cheek in a 60 Year Old Female- A Case Report; *SAR J Med Case Rep*, *7*(2), 18-20.

of the ocular examination was normal. The general physical and systemic examination was unremarkable with no significant laboratory findings. Consequently, an excisional biopsy was carried out with sample taken from right cheek lump and sample was sent for histopathological assessment. On gross examination it demonstrated a nodular area that revealed a cystic cavity on serial slicing. The cystic cavity is water-filled. Microscopic analysis revealed a lobulated lesion on underlying tissue containing proliferative squamous cells with hyperchromatic nuclei, brisk mitotic activity and abrupt keratinization; indicative of proliferating Pilar tumor. A Post Operative MRI head, face and neck with contrast to check for recurrence or residual tumor was performed that showed no cystic or solid lesion in the submandibular region and normal pharynx with no vascular or soft tissue abnormalities concluding that there is no evidence of recurrent or residual enhancing lesion in right malar region.

DISCUSSION

With a mean age of 64.1 years, proliferating pilar tumors most frequently affect women between the ages of 50 and 75 [4]. Approximately 90% of patients present with scalp lesions [2], while 80% being in the head and neck region [4]. In our case, the tumor was on the right cheek which is a relatively uncommon location for this neoplasm. This variability in case presentation demonstrates the importance for PPT to be a differential diagnosis when it comes to facial masses, especially in the elderly. These tumors initially develop as a focus of epithelial proliferation in trichilemmal cyst, with studies suggesting it is due to trauma or chronic inflammation, but it may arise de novo or develop from an organoid nevi, regardless of all this true malignant transformation is rare [5].

These neoplasms undergo slow but progressive enlargement over several months to years. This yields lobulated and variably exophytic masses that might ulcerate [6]. Our patient presented with a growing lump for 1.5 years which while consistent with previous studies emphasizes the need for early intervention to prevent delayed presentation which could have further complicated the tumor. Proliferative pilar tumors can be misdiagnosed as sebaceous cyst, as keratin plugging causes a sebaceous cyst to grow from the infundibulum of hair follicle, while proliferative pilar tumour is an extremely uncommon tumour that arises from the exterior root of a hair follicle. Since both are formed from hair follicles with distinct aetiologies, there may be chances of misdiagnosis, based only on appearance, so to avoid it, we needed a histopathological analysis to confirm the diagnosis [7].

Proliferating pilar tumors and SCC have morphological similarities, so differential diagnosis should be carefully distinguished between them also [6]. In order to distinguish PPT from SCC, an area of trichilemmal keratinization is observed as it is a histological hallmark of proliferating pilar tumors [5]. As SCC is aggressive and invasive as compared to PPT, hence why it is important to conduct a histological examination and conclude with a correct diagnosis, which is what was done with our patient.

Wilson-Jones2 first recognized this neoplasm in 1966 as an entity with the histologic capacity to simulate squamous cell carcinoma [8]. Over the years this entity has gained a variety of diagnostic terms such as Proliferating epidermoid cyst, pilar tumor of the scalp, proliferating trichilemmal cyst, proliferating epidermoid cyst, giant hair matrix tumor, hydatidiform keratinous cyst, trichochlamydocarcinoma, and invasive hair matrix tumor, to reflect differing interpretations of the biologic nature of the lesion in question [6].

As mentioned above, malignant transformation is rare, however cases have been reported of malignancy [9], which is why it is important for a proper histopathological and radiological examination in order to rule out malignancy, and nodal involvement, which considering the size of the tumor, was surprisingly benign. Examinations also confirmed no recurrence of the tumor which is consistent with previous studies.

CONCLUSION

This case demonstrates that proliferating pilar tumors, though predominantly found on the scalp, can present in atypical locations such as the cheek, posing a diagnostic challenge. The morphological similarities between PPTs and squamous cell carcinoma underscore the critical role of histopathological examination — particularly the identification of trichilemmal keratinization — in achieving an accurate diagnosis. Clinicians should maintain a high index of suspicion for PPT when evaluating facial masses in elderly women, even at uncommon sites.

REFERENCES

1. Lee S, Choi J, Sung K, Min J, Joo H. Proliferating Pilar Tumor of the Cheek Misdiagnosed as Squamous Cell Carcinoma. Indian J Dermatol. 2022 Apr;67(2):207.
2. Alshaalan Z, Patel P, Routt E, others. Proliferating pilar tumor: two cases and a review of the literature. J Drugs Dermatol. 2021;20(12):1346–8.
3. Requena L, Crowson A, Michal M, others. Proliferating trichilemmal tumour. In: Elder D, Massi D, Scolyer R, others, editors. WHO classification of skin tumours. 4th ed. Lyon, France: International Agency for Research on Cancer; 2018. p. 196–7.
4. Lee SI, Choi JH, Sung KY, Min J, Joo HS. Proliferating Pilar Tumor of the Cheek Misdiagnosed as Squamous Cell Carcinoma. Indian J Dermatol. 2022 Apr;67(2):207.
5. Chaichamnan K, Manuskiatti W. Malignant Proliferating Trichilemmal Tumors. J Med Assoc Thai. 2010 Nov;93(Suppl 6):S28–34.

6. Ye J, Nappi O, Swanson PE, Patterson JW, Wick MR. Proliferating Pilar Tumors. Am J Clin Pathol. 2004;122(4):566–74.
7. Imran FH, Imami NH, Wen APY. RARE DIAGNOSIS OF A PROLIFERATING PILAR TUMOUR IN A FACIAL HAIRLINE CYST. Folia Medica Indones. 2022;58(1):56–60.
8. Wilson-Jones E. Proliferating epidermoid cysts. Arch Dermatol. 1966;94:11–9.
9. Azzopardi JG, Hou WJ. Malignant transformation in proliferating pilar tumors: A case report and review of the literature. Histopathology. 1995 Dec;27(6):553–6.