

## **RESEARCH ARTICLE**

#### MALIGNANT PROLIFERATING TRICHILEMMAL TUMOR ONE CASE AND LITERATURE REVIEW

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# Manuscript Info

## Abstract

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#### Key words:-

Trichilemmal Cyst, Proliferating Trichelemal Tumor, Malignant Proliferating Trichilemmal Tumor, Treatment, Prognosis Proliferating trichilemmal tumors (PTTs) are uncommon lesions. PTT is thought to originate from the trichilemmal cyst (TC) and have the potential for malignant transformation, at which point it is termed a malignant proliferating trichilemmal tumor (MPTT). we report an observation of a 55-year-old lady patient presenting with a malignant proliferative trichilemmal tumor, emphasizing the aggressive, rapidly extensible and metastatic character. MPTTare aggressive tumors with a bad prognosis, the treatment of which is based on surgery with margins of 1 cm, lymph node dissection in the event of lymph node involvement and radio-chemotherapy.

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#### **Introduction:-**

The proliferating trichilemmal tumor (TTP), also called a proliferating trichilemmal cyst, is an infrequent adnexal tumor that arises from the isthmic portion of the hair follicle.

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It is an often-solitary tumor, preferentially located in the scalp of elderly women, malignant forms are rare.

Through a new observation and a review of the literature, we discuss the clinical, therapeutic and prognostic profile of this entity by objectifying the aggressive nature of the malignant forms.

#### **Case report**

A 55 years old female patient, with no backgrounds, was admitted in our institution for a big ulcerative and nodular mass of the left parieto-occipital scalp, she reported that it was a small lesion 20 years ago, and only 10 months ago it started to grow fast. (figure1)

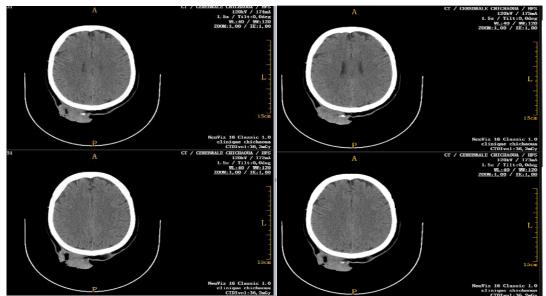


Figure 1:- Tumors aspect and location

the clinical examination objectified the presence of an ulcerated nodular tumor 7/6/3 cm in diameter fixed in relation to the bone, painful, bleeding on contact, with the presence of other subcutaneous lesions of the scalp to the number of 5 painless and mobile, the largest measures 2/2 cm (figure 1)

A punch biopsy for the biggest mass revealed a malignant proliferative trichilemmal cyst.

The cerebral CT scanshowed that the tumor comes into contact with the bone without bone invasion. (figure2)



**Figure 2:-** cerebral CT scan the patient was operated, the surgical procedure included tumorexcision withremoving the periosteum and the external table of the bone for the biggest lesion and simple excision for the other cysts. (figure 3).



Figure 3:- Excision of all tumors Histological examination showed, amalignant proliferative trichilemmal cystwithtumor extension to the bone for the biggest lesion, and for the other lesions a simple trichilemmal cysts was detected.

In the meantime, a mass on the back of the neck has appeared. (figure4)

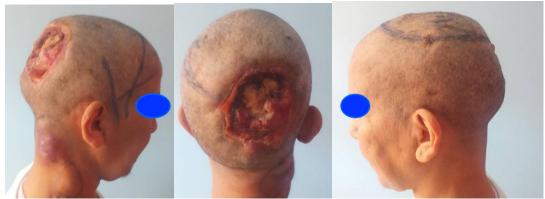


Figure 4: reccurence of the tumor and appirition of the neck mass

cervical echography demonstrated the presence of cervical and spinal lymphadenopathy.

the total body CT did not reveal any abnormalities.

the patient was scheduled for revision surgery with bone resection and coverage with a bi-pediculated scalp flap, the donor area of the flap was covered by a thin skin graft, with removal of the spinal lymphadenopathy and left cervical dissection. (Figure 5)



Figure 5:- Excision of the tumor and coverage with scalp flap.

The Postoperative was simple, the patient was declared outgoing on day 3.

The definitive pathological resultsshowed nontumoral operatingmargins with metastatic spinal lymphadenopathy.

The patient was subsequently referred to the onco-radiotherapy department.

#### **Discussion:-**

Proliferating trichilemmal tumors are uncommon lesions, the scalp location is most common [1,2,3], described as smooth, rounded, like a pigeon's egg [4] may have an overwilling of alopecia.[5]

Women are more likely to be affected then men [1,6,7], noted after the age of 60years[1,6,7].

Malignant Proliferated trichilemmal tumors (MPTTs) are more common in the scalp [1,6,7], may look similar to TC or may present as fungating masses with ulceration [8], occurs also after the age of 60 [1,6,7] but may appear even much earlier at the age of 18. [9]

MPTTs range in size from less than 1 to 10 cm. [7]

MPTT is known to recur, especially after conservative local excision, recurrences can occur between 6 months and 10 years [3,5].

These lesions may also exhibit aggressive local invasion, across tissue planes and even intracranially, causing considerable morbidity and even mortality [1,7], like in our case, metastases are possible mainly lymph nodes [1,3,7].

Treatment of MPTTs include an excision with a 1cm margin of normal tissue to prevent recurrence.

If the histological diagnosis of MPTTT is made, moreaggressive therapeutic measures such nodal dissection, radiotherapy or chemotherapy should be considered in addition to wide local excision, in our case a nodal cervical dissection was made and radiotherapy.

### **Conclusion:-**

Trichelemmal tumors are rare, aggressive, with rapid evolution and high potential ofnodal metastasis and significant recurrence, close monitoring is essential, treatment involves both surgery and radio-chemotherapy.

### **References:-**

[1] AnitaKSatyaprakash, Daniel J Sheehan, Omar P Sangu EZA. Proliferating Trichilemmal Tumors: A Review of the Literature .Dermatologic surgery.2007 Sep;33(9):1102-8

[2] Brownstein M, Arluk D. Proliferating trichilemmal cyst: a simul- ant of squamous cell carcinoma. Cancer 1981;48:1207–14.

[3] Park BS, Yang SG, Cho KH. Malignant proliferating trichilemmal tumor showing distant metastases. Am J Dermatopathol 1997;19:536–9.

[4] T SAIDA, K OOHARA, Y HORI, S TSUCHIA .DEVELOPMENT OF A MALIGNANT PROLIFERATING TRICHILEMMAL CYST IN A PATIENT WITH MULTIPLE TRICHILEMMAL CYSTS.CASE REPORTS. DERMATOLOGICA.1983; 166 (4): 203-8

[5] Mathis ED, Honningford JB, Rodriguez HE, et al. Malignant proliferating trichilemmal tumor. Am J Clin Oncol 2001;24: 351–3.

[6] Baptista AP, Silva LGE, Born MC. Proliferatingtrichilemmalcyst. J CutanPathol 1983;10:178.

[7] Sau P, Graham JH, Helwig EB. Proliferating epithelial cysts: clinicopathological analysis of 96 cases. J CutanPathol 1995;22:394–406.

[8] Karaca S, Kulac M, Dilek FH, et al. Giant proliferating trichi- lemmal tumor of the gluteal region. DermatolSurg 2005;31:1734–6.