University Journal of Surgery and Surgical Specialities

ISSN 2455-2860 **2018, Vol. 4(1)**

TRICHILEMMOMA - AN UNUSUAL CLINICAL PRESENTATION

VIGNESWARA SRINIVASAN
Department of General Surgery,
COIMBATORE MEDICAL COLLEGE

Abstract : Trichilemmoma is a benign cutaneous tumor that shows characteristics of differentiation similar to the outer hair sheath. It usually occurs as a small solitary papule on the face. We report a case of trichilemmoma presenting as a relatively larger scalp swelling. This report documents a non-facial example of trichilemmoma. Atypical clinical appearance and localization of this neoplasm suggest that only histological findings are specific of this tumor.

Keyword : Trichilemmoma, benign scalp swellings

INTRODUCTION:

In 1962, Headington and French first described trichilemmoma as a benign neoplasm with differentiation toward pilosebaceous follicular epithelium or outer root sheath. Clinically, trichilemmomas present as well-defined, smooth, asymptomatic papules or verrucoid growths. They may appear as a solitary or multiple lesions, and are usually found on the head and face. Here we present a relatively uncommon presentation of trichilemmoma.

CASE REPORT

A 70 year old lady cooly by occupation presented to the OPD with complaints of swelling in the left side of scalp for the past 15 years. Swelling was small to start with gradually progressed to the current size with no history of trauma, no history of discharge from the swelling, no history of pain and no history of any other swelling in the body. She did not suffer from any chronic illness nor she has underwent any other surgeries in the past. She had normal sleep and appetite, normal bowel and bladder habits. There was no history of any substance abuse.

On examination her general condition was fair. She was moderately built and nourished. Examination of cardiovascular system, respiratory system, and central nervous system was found to be normal.On local examination of the swelling, it was of size 3× 3× 2 cm in left occipitoparietal region **(Fig 1)**. Swelling was hemispherical in shape,skin over the swelling had peau d orange appearance **(Fig 2)**, surface was irregular,there was no punctum, margins were well defined.Swelling was not tender, no warmth felt, no evidence of inflammation, consistency was soft, skin over swelling was not pinchable was not pulsatile,was neither compressible nor reducible, there was no impulse on coughing and was not transilluminant. We considered differential diagnosis of dermoid, sebaceous cyst and any benign skin tumors.

Due to atypical presentation of the swelling dermatological opinion was sought. They suggested the diagnosis of trichoblastoma and advised us to proceed with excision biopsy. Her routine blood investigations, chest xray, ECG, were found in normal limits. Her x ray skull and CT brain showed soft tissue swelling with no bony involvement.We proceeded with excision of the swelling**(Fig 3&4)**. To our surprise histopathology report was trichilemmoma and was not trichoblastoma. It showed well circumscribed tumor arranged in lobules. tumor cells had abundant glycogenated cytoplasm with peripheral palisadinng pattern arrangement and are surrounded by PAS positive thick basement membrane like material, charecteristic of trichilemmoma**(Fig 5)**. The raw area was closed with SSG 2 weeks later.

This case is reported for an uncommon diagnosis of a scalp swelling as well as an unusual presentation of trichilemmoma.

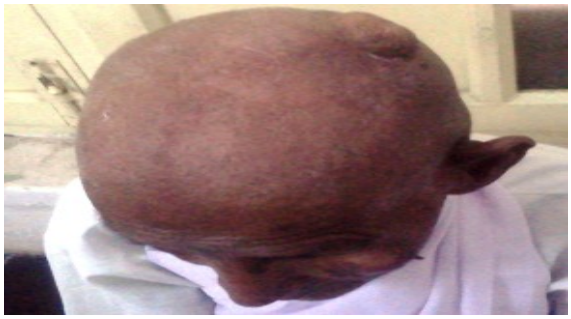

Fig 1

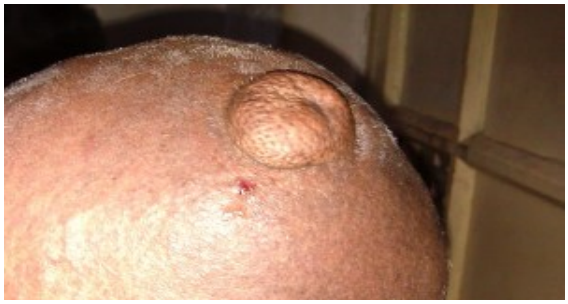

Fig 2

Fig 3

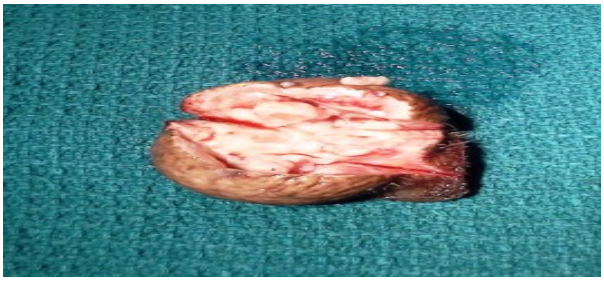

Fig 4

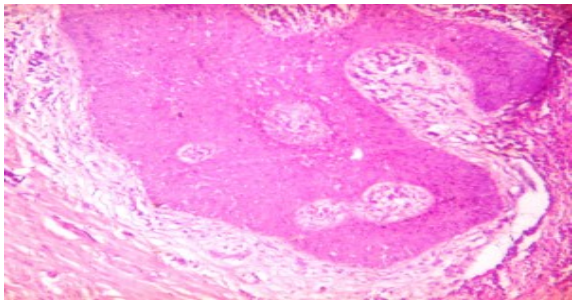

Fig 5

DISCUSSION

Trichilemmoma is a benign neoplasm that differentiates toward cell of the outer root sheath. It may occur as a small solitary papule on the face particularly the nose and cheeks. They may also occur as multiple fascial leisons. When they do it is a specific cutaneous marker for Cowden syndrome an autosomal dominantly inherited condition.The underlying cause of trichilemmomas is unknown, although because of its histologic similarity to a wart, some researchers have investigated a viral etiology.The international frequency of trichilemmoma is unknown. They are associated with minimal morbidity and no mortality. The male-to-female ratio of trichilemmomas is 1:1; however, Cowden syndrome has a female predominance, with a male-to-female ratio of 1:3.

Trichilemmomas predominantly occur in patients aged 20-80 years. However, onset may occur as early as age 4 years, with a median age of onset at 30 years. Patients with trichilemmomas usually give a history of a slow-growing, asymptomatic papule and/or plaque on the face. The leisons may be solitary or multiple. The trichilemmomas are generally limited to head and neck. However unusual sites may be involved.No single feature allows the clinical diagnosis of a trichilemmoma, but rather this diagnosis is usually rendered histologically. However, if multiple lesions are present on the face, trichilemmomas associated with Cowden syndrome may be suspected.Patients with trichilemmomas usually present with either a single papule or multiple, small, flesh-colored papules that are 1-5 mm in diameter on the face or the neck. When these lesions grow in size, small plaques may be found, particularly in the nasolabial fold region. As trichilemmomas slowly enlarge, they often produce a hyperkeratotic surface suggestive of a verruca or a cutaneous horn.

If a diagnosis of trichilemmoma is rendered, the patient should be completely examined for evidence of Cowden syndrome. Mutation in tumour suppressor gene P-TEN is responsible for Cowden syndrome. Cowden syndrome is characterized by mucocutaneous leisons, fascial trichilemmomas, other follicular hamartomas, acral keratosis, and oral papillomas. There is high rate of associated breast cancer, GI polyps and thyroid abnormalities.

A skin biopsy is used to establish the diagnosis of a trichilemmoma. A shave biopsy is most commonly performed. Other investigations are primarily aimed at establishing the diagnosis and in searching for potential malignancies associated with Cowden syndrome.Microscopically trichilemmomas show variable hyperkeratosis and parakeratosis. Tumour lobules extend downward from the epidermis. They demonstrate glycogen rich clear cells, peripheral palisading, and a thick hyalinised basement membrane.

Because these tumors are benign, no medical treatment is required. However, a few treatment options are available, ranging from simple surgical excision to carbon dioxide laser tissue ablation. Isotretinonin has been used to treat cutaneous leisons but even those that regress tend to recur when discontinued. Excision is an option but is less commonly performed because of the benign nature of this neoplasm and its common location on the face. Probably the most elegant procedure to date for removing a trichilemmoma is the use of a carbon dioxide laser for tissue ablation. Carbon dioxide laser has been used for removal of a wide range of epidermal and dermal growths or neoplasms. The patient should be educated regarding the benign nature of this epithelial neoplasm

CONCLUSION

Trichilemmoma may rarely present as a benign scalp swelling. In case of atypical presentations diagnosis can only be confirmed by histopathological examination.

REFERENCES

* Mann B, Salm R, Azzopardi JG. Pilar tumour: A distinctive type of trichilemmoma. Diagn Histopathol 1982;5:157-67. PUBMED

* Ye J, Nappi O, Swanson PE, Patterson JW, Wick MR. Proliferating pilar tumors: A clinicopathologic study of 76 cases with a proposal for definition of benign and malignant variants. Am J Clin Pathol 2004;122: 566-74. [PUBMED]

* Reed RJ, Lamar LM. Invasive hair matrix tumours of the scalp. Arch Dermatol 1966;94:310-6. PUBMED

* Poiares Baptista A, Garcia E Silva L, Born MC. Proliferating trichilemmal cyst. J Cutan Pathol 1983;10:178-87. [PUBMED] Janitz J, Wiedersberg H. Trichilemmal pilar tumour. Cancer 1980;45:1594-7. [PUBMED]
* Rook Wilkinson, Ebling textbook of dermatology, 6th edition.
* Moschella and Hurley- dermatology 3rd edition.
* Busam Klaus J., Dermatopathology s.386; 2010 Saunders ISBN 978-0-443-06654-2
* James, William D.; Berger, Timothy G.; et al. (2006). Andrews' Diseases of the Skin: Clinical Dermatology. Saunders Elsevier. ISBN 0-7216-2921-0.
* Rapini, Ronald P.; Bolognia, Jean L.; Jorizzo, Joseph L. (2007). Dermatology: 2-Volume Set. St. Louis: Mosby. pp. 1699–1700. ISBN 1-4160-2999-0.

An Initiative of The Tamil Nadu Dr. M.G.R. Medical University
University Journal of Surgery and Surgical Specialities