AN INTERESTING CASE OF ANCIENT SCHWANNOMA

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ABSTRACT: INTRODUCTION: Schwannoma is a common benign tumour of nerve sheath. Degenerating type of schwannoma is called ancient schwannoma. Ancient schwannomas of scalp are rare and are often misdiagnosed as sebaceous cyst or dermoid cyst. **CASE REPORT:** We present a thirty two year old male presented with scalp swelling of eight years duration. X-ray showed no intracranial extension. He underwent excision of the tumour and histopathology was reported as ancient schwannoma. **DISCUSSION:** Histopathologically, ancient schwannomas charecterised by cellular Antoni type A areas and less cellular Antoni type-B areas. 9th, 7th, 11th, 5th and 4th cranial nerves are often affected and may be associated with multiple neuro fibramatosis (Von-Recklinghausen's disease). **Impact:** Case is presented for its rarity and possible pre-operative misdiagnosis.

INTRODUCTION: Schwannoma is one of the common soft tissue tumors. It is a benign tumor arising from the Schwann cells of nerve sheath and may present with pain and paresthesia in the nerve distribution area.[1]

Ancient schwannoma are degenerating neurilemmoma is characterised by diffuse hypo cellular areas and degeneration. The long time taken in development of ancient schwannoma is believed to be the cause of this degeneration.[2]

Ancient schwannoma in the scalp is rare and may be misdiagnosed as dermoid cyst or sebaceous cyst. We present a case with scalp swelling which was diagnosed preoperatively as sebaceous cyst.

CASE STUDY: 32 years old male from Ottanchatram, Tamilnadu, India presented with painless swelling over scalp over left parietal region of 8 years duration. It was a slow growing tumor.

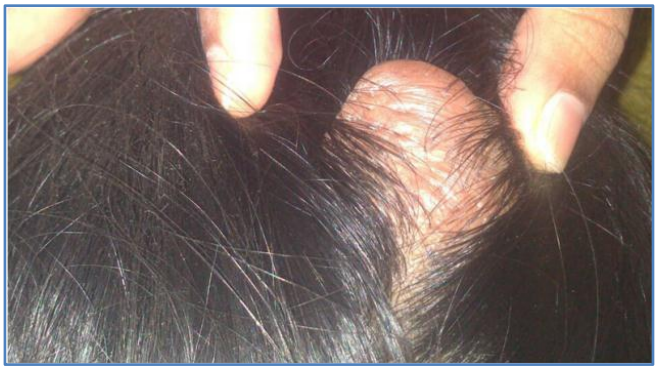


Fig. 1

On examination it was 6x5 cms, non-tender, firm, freely mobile, not fixed to underlying structures and skin, no bony indentation over left parietal region scalp.

Routine investigations were done. X-ray skull & X-ray chest taken. In skull x-ray calcified mass seen with no intracranial extension.

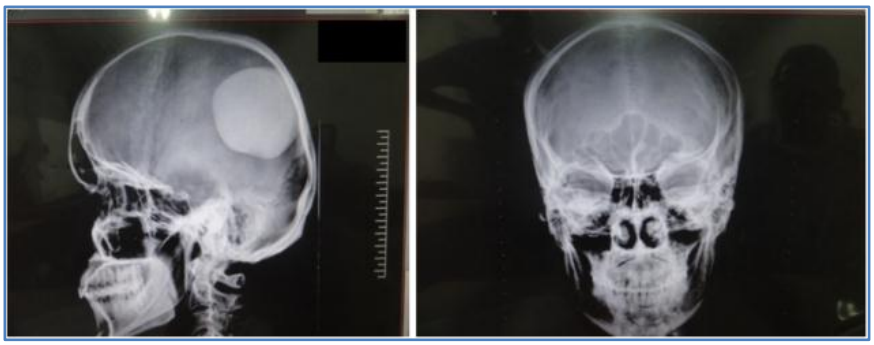


Fig. 2 **Fig. 3**

Under local anaesthesia mass excised in toto without any difficulty and sent for histopathological examination. Post-operative period was uneventful.

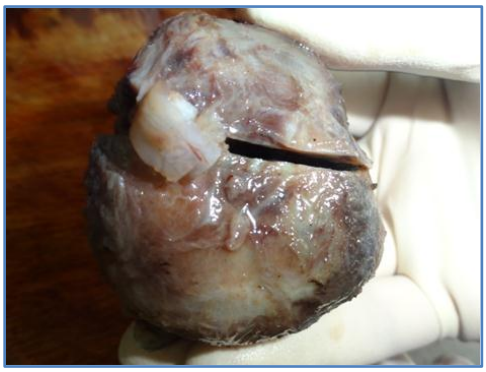
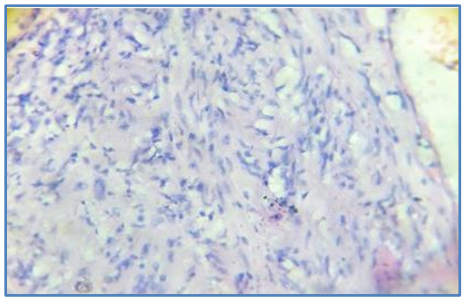


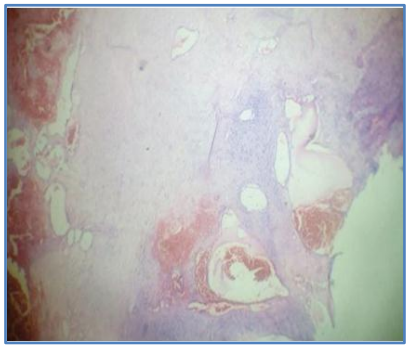
Fig. 4: HPE report came as ANCIENT SCHWANNOMA

A Highly ordered cellular pattern with spindle cells arranged in compact fascicles and their nuclei arranged in palisades [verocay bodies].



Anton A

Less Cellular areas with loose mesh work of cells and myxoidchanges and gelatinous matrix.



Anton B

DISCUSSION: Benign tumors arising from the peripheral nerves are common and those originating from Schwann cells are also well documented.[3] They are divided into two subgroups, Neurofibromas and Schwannommas.[4] In 25% of cases schwannoma occur in the head and neck region and are sometimes associated with Vonrecklinghausen's disease in 8 -18%.[4]

Clinical evaluation of our patient did not show any evidence of Vonrecklinghausen's disease. Schwannomas are equally distributed in both sexes and the highest incidents are noted between third and fifth decades[5] as in our case. Clinically schwannoma can present as solitary [most common], plexiform, cellular, cystic[6] and ancient form. When not associated with neuro fibro matosis schwannomas are usually solitary and slow growing showing symptoms only when a very large area is affected. Presentation may be with swelling alone, pain in the area of nerve distribution, parasthesia and tenderness. Extra dural schwannoma are most commonly found in association with large nerve trunks.[7] Most commonly affected cranial nerves are 9th, 7th, 11th 5th and 4th in that order.[1, 8]

Our patient's lesion might have arisen from the temporal branch of auriculo temporal nerve a branch of mandibular division of trigeminal nerve. Histopathologically schwannomas are encapsulated b perineurium and shows two characteristic histological patterns Antoni type A and antoni type B.[9] Antoni type A is highly ordered cellular pattern with spindle cells arranged in compact fascicles and their nuclei arranged in palisades [verocay bodies]. Antoni type B is characterised by less cellular areas with loose mesh work of cells and myxoidchanges and gelatinous matrix.[1, 7, 9]

Immuno histochemistry of schwannoma may reveal positive S 100 and collagen type IV. Capsule may be positive for epithelial membrane antigen.[10, 11] Other immuno histochemical strains like Leu,[7] myelin basic protein, CD 34, CD 68, collagen I, III, IV, and vimentin are also useful.

Scwannomas of scalp are rare and those with ancient histopathological pattern are extremely rare. When our patient presented with asymptomatic growth over scalp, we had a differential diagnosis sebaceous cyst or dermoid cyst, since they are common in this site.

Dermoid cysts are endodermal growths developing from epithelial tract along lines of embryonic fusion, commonly in the scalp, forehead or periorbital areas. They are characteristically

asymptomatic, soft, rubbery round subcutaneous cyst.[12, 13] Sebaceous cyst present as smooth, mobile, firm dermal nodule commonly seen in middle age.[14]

CONCLUSION: In conclusion, cutaneous schwannomas are rare tumours. Those with degenerative changes (ancient shwannomas) are even rarer. A differential diagnosis of schwannoma should be considered in case of asymptomatic freely mobile soft to firm or cystic swelling over scalp.

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