PALISADED ENCAPSULATED NEUROMA- A RARE CASE REPORT

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CASE SUMMARY

A 38-year-old female patient presented to our dermatology outpatient department with a solitary lesion over the face which was of 8 years duration. The lesion was associated with pain and exhibited a slow progressive growth. Her past medical history was unremarkable. Cutaneous examination revealed a solitary, well-circumscribed, firm, translucent papule, 5 mm in diameter which was located over the right nasal area. Mucosa was uninvolved. Systemic examination was normal. Ophthalmological and neurological examination were also within normal limits.

Based on the clinical findings, a provisional diagnosis of pilomatricoma was made. An excisional skin biopsy was performed followed by histopathological examination which revealed a raised, well-demarcated, nodular lesion centred in the dermis and subcutaneous tissue. It comprised of spindle shaped cells arranged in short fascicles, whorls and haphazard arrangement. The cells have bland elongated wavy nuclei. The cytoplasmic outlines were indistinct and fine collagen fibers with focal areas of palisading of nuclei were observed. There was no atypia and aberrant mitosis. These findings were consistent with palisaded encapsulated neuroma. A clinicopathological discordance was noted and histopathology was essential to establish a definitive diagnosis.

DISCUSSION

Palisaded encapsulated neuroma (PEN), also referred to as solitary circumscribed neuroma, is a rare benign cutaneous tumour which was first described by Reed et al in 1972.[1] It is characterized by spontaneous proliferation of nerve fibres without any evidence of previous trauma. It is a painful skin tumour and is one among the painful skin tumours that constitute the acronym 'BLEND TAN EGG' with pain being attributed to the presence of nerve tissue.[2] It shows no gender predilection and occurs in middle-aged adults.

Clinically, it presents as a solitary, firm, sessile, immobile, rubbery, skin-coloured or pink dome-shaped papule or nodule, usually manifesting over the face or adjacent to a mucocutaneous junction. The lesions are usually asymptomatic and range in size from 2 mm to 6 mm. Literature review demonstrates that there is no definite association with neurofibromatosis or MEN2B.[3,4]

Multiple cutaneous lesions can also be rarely seen in a zosteriform distribution.[5]

On gross examination, the tumour is firm, ovoid in shape and on cut section shows a yellow-pink mass located in the dermis.

Histopathologically, it is a well-circumscribed nodule located in the dermis and partially surrounded by a thin fibrous capsule. The tumour is composed of tightly woven fascicles separated by a cleft like space. The individual tumour cells are slender, spindle cells with an ovoid nuclei, evenly dispersed chromatin and eosinophilic cytoplasm. Mitosis is rare.[6] Nodular growth pattern is most frequently encountered. However, several other growth patterns include epithelioid, plexiform, multinodular and fungating type.[7] Clinically, this tumour can be misdiagnosed as neurofibroma, basal cell carcinoma, melanocytic naevus, epidermal cyst or skin adnexal tumour and histologically as neurofibroma, schwannoma, traumatic neuroma and leiomyoma.[8,9] The proposed pathophysiology of the PEN highlights a hamartomatous growth of Schwann cells predominating over the number of axons.[10] Excision is often curative without any recurrence.[8]

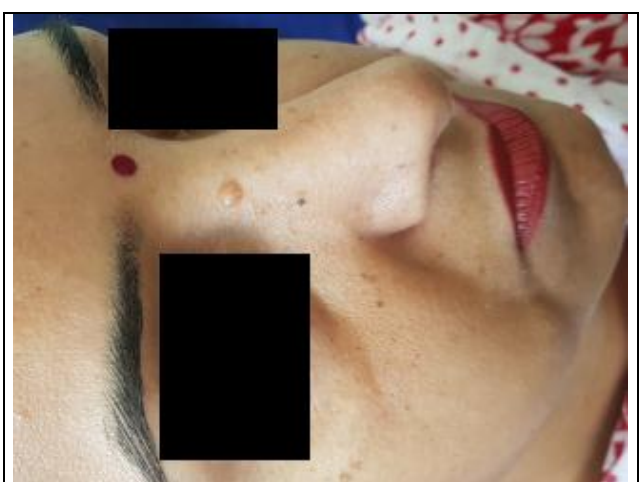

Figure 1. Neuroma

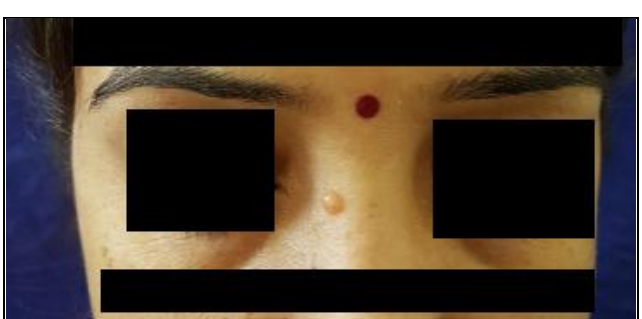

Figure 2. Neuroma Close Up

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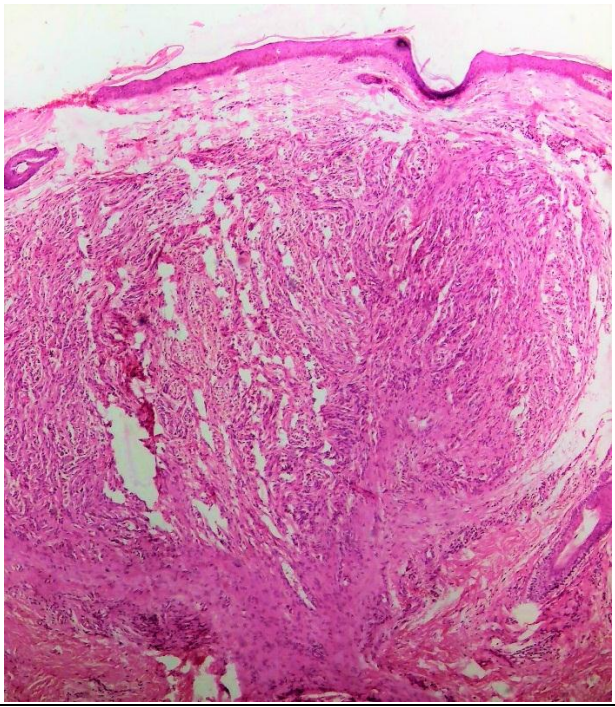

Figure 3. Neuroma HPE- Dermal Nodule

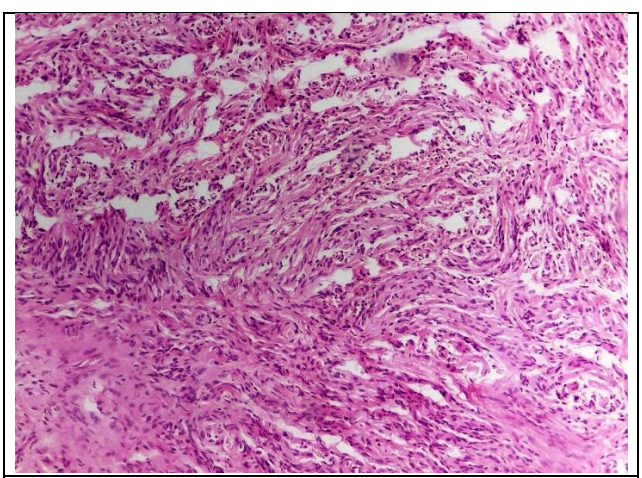

Figure 4. Neuroma HPE

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