Nuerothekeoma of Both Feet - A Rare Case

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Abstract: Nerve sheath myxomas (neurothekeoma) are uncommon tumors of nerve sheath origin. They are more common in females and younger individuals. The first neurothekeoma was reported in the literature as a nerve sheath myxoma by Harkin and Reed in 1969^[1]. However, this type of tumor received its current definition as neurothekeoma in 1980 by Gallager and Helwig^[2]. These tumors most frequently arise in the dermis and subcutaneous tissues of the head and neck, and upper extremities and most common in females with a mean age of 21.6 years and are usually asymptomatic ^[3]. These are typically slow growing, painless lesions that are less than 3 cm diameter. We report a case of neurothekeoma of the feet of more than 3 cm in size.

1. Case Presentation:

A 56 year male patient presented with multiple, slow growing, and protuberant lesions on both feet. The patient originally noticed the lesions 2 years ago. No evidence of pus discharge, bleeding or pain. No previous history of trauma, scar to the area.

On examination, multiple, painless, nonmobile, soft swellings ranging from 1×2 cm to 4×6 cm sizes involving medial aspects of both the feet were seen. No tenderness or visible pore seen. No evidence of enlarged lymph nodes. The patient was otherwise healthy with unremarkable family and social history.

For further investigation, excisional biopsy was planned.

2. Investigations

Excision biopsy of one of the lobular swellings from the right side of foot was done with a 1 mm margin and the lesion was completely removed and sent for biopsy. The histopathological examination revealed a lobular patterned tumor which was poorly circumscribed in reticular dermis with extension to subcutaneous tissue. Margins were free of infiltration. The rumor consists of nests of spindle and epitheloid cells with pale eosinophilic cytoplasm and vesicular nuclei in the backdrop of thick collagen, consistent with cellular neurothekeoma. Spindle and epithelioid cells were positive for vimentin, NKI-C3, CD10 and smooth muscle actin. They are negative for S-100. No cellular atypia was identified.Hence, a diagnosis of neurothekeoma was made.



Fig 1 and 2 showing multiple, protuberant soft lesions of various sizes, largest measuring 4 cm x 2 cm on the right foot.

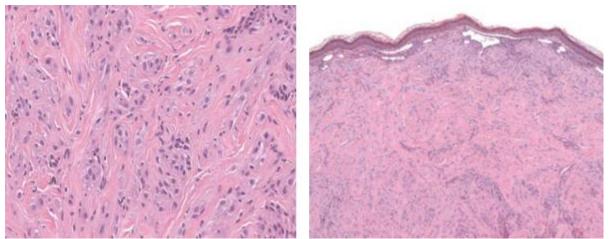


Fig 3 and 4 shows multiple epitheloid and spindle cells in the background of dense collagen

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10.21275/ART20202194

3. Discussion

Neurothekeomas are rare, benign, superficial, soft tissue tumors of unknown histogenesis^[5]. Neurothekeoma may be either asymptomatic or may present as a painful raised, skin colored, well-circumscribed lesion averaging 1 cm in diameter that involve the skin and superficial subcutis. This tumor has been subclassified as Cellular, Myxoid and Mixed depending on the amount of myxoid matrix. Our case here presented with big and multiple lesions of more than 3cm. The lesions were present on rare site (both feet).

The differential diagnosis for an epithelioid mass in the head and neck region include granular cell tumor, cellular neurothekeoma, nerve sheath myxoma, neurofibroma, schwannoma, benign fibrous histiocytoma, melanocytic lesions, and infection^[4] which can be ruled out through histopathological examination and immunohistochemistry.

4. Conclusion

We present this case for its rarity, uncommon location on the feet with large size and present in an elderly male. After complete surgical excision, patient recovered without any complications and did not have recurrence 3 years postoperatively.

References

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10.21275/ART20202194