Diffuse neurofibroma of scalp

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ABSTRACT

A 22-year-old man presented with a large, soft, compressible swelling in the right occipito-parietal region. Fine needle aspiration cytology revealed blood only. The lesion was excised and histopathology studies revealed it to be a diffuse neurofibroma.

Key words: Computed tomography, diffuse neurofibroma, scalp

Introduction

A diffuse neurofibroma is a variant of neurofibroma, most commonly involving the head and neck. It occurs in young adults. We came across such a case recently and it is being reported here because of its rarity and unusual features.

Case Report

A 22-year-old male presented with history of a slowly progressive painless swelling in the right parieto-occipital region since the last eight years. There was history of preceding trauma. On examination there was a large, 14 × 12 cms, non tender, compressible swelling with ill defined margins [Figure 1]. The swelling involved the skin and no bony abnormality could be felt underneath. There was no bruit over the mass. There were no café-au-lait spots over the body. FNAC done at another hospital revealed blood only. A computed tomography revealed a hypodense lesion, without enhancement after contrast administration [Figure 2]. According to the clinical and CT scan findings, a provisional diagnosis of subcutaneous venous hemangioma was made. At surgery, running sutures were passed around the swelling and a grayish pink soft vascular tissue was separated from the pericranium and galea. At places, the lesion was found to be infiltrating the skin. Redundant skin was excised. Post operatively, the skin necrosed at places and was treated with antibiotics and dressings. Histopathology showed elongated cells arranged in haphazard fashion. Wagner Meissner bodies and pigment laden macrophages were seen [Figure 3]. Interspersed adnexal structures were present. Fibro-adipose tissue with collagen, and spindle cells bearing wavy nuclei were also seen. Some nerve bundles were found in the tumor. The final histopathological diagnosis was subcutaneous diffuse neurofibroma.

Discussion

Neurofibromas are well-known benign tumors of the peripheral nerve sheath. According to their growth patterns, they may be categorized as local, plexiform and diffuse types. Diffuse neurofibromas occur most commonly among children and young adults. They have a slight predilection for trunk, head and neck and the limbs and may become very large as seen in our case. A majority of the diffuse neurofibromas (90%) are isolated lesions, not associated with neurofibromatosis type I. In 10% of the patients, diffuse neurofibromas may have neurofibromatosis. Diffuse
Diffuse neurofibroma of the scalp should be kept in the differential diagnosis of any diffuse scalp swelling. Because of their highly vascular nature due care should be taken during excision.

**References**

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