Meningioma presenting as an Asymptomatic Scalp Swelling

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ABSTRACT

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A case of meningioma presented as an asymptomatic scalp swelling is reported in this article because of its rare presentation. A 77 yrs old active healthy male incidentally detected to have a scalp swelling in the occipital region. No significant abnormality was detected in the skull X-ray. FNAC suggested meningioma with atypia. CT scan revealed an enhancing extra axial mass infiltrating through occipital bone to reach beneath the skin. The patient succumbed to the disease within 3 months.

Keywords: Intra extra cranial meningioma, Atypical meningioma.

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INTRODUCTION

Meningioma is usually a benign encapsulated, slow growing, asymptomatic extra axial mass arising from meningothelial cells that will eventually create mass effect and severe morbidity before causing death. Meningiomas presenting with scalp swelling, osteolytic skull lesions and extracranial soft tissue masses are rare and are more aggressive in nature.¹

CASE REPORT

A 77 yrs old male, known asthmatic was admitted to the medical ward with exacerbation of bronchial asthma due to chest infection. Physical examination revealed a swelling of the occipital region about 3 cm in diameter that has been there since last one year. There was no history of trauma. The swelling was not mobile or tender and was not adhering to the overlying skin.



Figure 1(A). Subcutaneous diffuse swelling over the occipital region **(B)** and the normal Xray skull

The patient had no neurological symptoms or signs. Fundus was normal. Respiratory system examination showed bilateral rhonchi only. Other systems were within normal limits. The laboratory studies were un remarkable. He was evaluated by plain Xray skull Xray chest, ultrasound abdomen and neck were within normal limits.

FNAC from scalp swelling (See figures 1A, B and 2) showed typical cytological appearance of meningioma along with psammoma bodies and possibility of meningioma was looked for.

CT scan brain (figure 3) revealed an extra axial enhancing solid mass of 4x1.3cm associated with destruction of both inner and outer tables of skull at high parietal



Figure 2. FNAC(PAP stain): Meningiothelial cells in attempted whorls with Characteristic psammoma body (red arrow) and nuclear atypia (black arrow)

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Figure 3. Extra axial enhancing mass destroying the Inner table more than the outer table and extending to scalp

region Calcification or necrosis not detected.

Patient refused the surgery and finally died from coma and severe head ache within 3 months.

DISCUSSION

Meningioma accounts for approximately 20% of all primary intracranial neoplasms. Autopsy studies reveal that 2.3% of individuals have undiagnosed asymptomatic meningiomas as in our patient.² Benign meningiomas are more commonly seen in women. Imaging studies remain the mainstay of diagnosis.³ MR spectroscopy has specific spectral pattern for meningioma and can provide additional information in cases in which the differential diagnosis of tumors by neuroimaging is difficult.⁴ Classically plain skull radiograph may reveal hyperostosis and increased vascular markings of the skull, as well as intracranial calcifications but were absent in this case. CT scan showed an enhancing solid mass destroying the inner table more extensively than the outer table .Radiological possibilities for bone metastasis with soft tissue extension are tumors of kidney or thyroid or malignant meningioma. But no primary lesion was detected in this case by Xray chest or Ultrasound neck and abdomen The histological appearance of a meningioma is an important predictor of tumor behavior and still remains a factor in taking decisions concerning therapy. Meningiomas are categorized based on the histologic pattern, atypia, brain invasion or mitosis as benign/gradeI (90%), atypical/GradeII (7-8%), and malignant/grade 3 (2-3%). Grade 2 and 3 tumors recur more frequently than grade 1 types5. FNAC smears of our patient showed classical meningothelial cells with attempted whirling, mild nuclear enlargement and nucleoli but no mitosis or necrosis detected to make direct diagnosis of Grade 3 meningioma. Psammoma bodies were the other characteristic findings of meningioma. Surveys show that the neurological morbidity rate in surgically treated older than age 70 years patients having asymptomatic meningioma was 20%, and the advisability of surgical intervention also deserves careful consideration.² Also the patient refused for any surgical intervention. He succumbed to the illness with severe head ache followed by coma within 3 months.

END NOTE

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