CASE REPORT

Intracranial plasmacytomas mimicking epidural hematoma and revealed by head trauma

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ABSTRACT

Presenting a case of 27-year-old female presented in our OPD on 6-12-2013 with severe headache and vomiting and no history of LOC/seizure. There was H/O head trauma 2 month back. O/E pupil of normal size and normal reaction to light and neurological status with GCS-14. CT scan showed a hyperdense left frontal chronic extradural/subdural mass lesion and midline shift of 8 mm. Peroperative there was intradural lesion as nonvascular, greyish white gelatinous solid tissue without evidence of EDH. The lesion was completely excised, and the skull the bone flap was replaced.Uneventful post operative recovery with GCS-15. Histopathological report was plasmacytoma.

Key words: Epidural hematoma, head injury, plasmacytoma

Introduction

Intracranial plasmacytomas are rare in neurosurgical practice.[1] We present the patient with intracranial plasmacytomas mimicking epidural hematoma on computed tomography (CT).

Presentation and intervention

A 27-year-old female presented in the outpatient department on December 06, 2013 with a severe headache and vomiting without any history of loss of consciousness or seizure. There was H/O head trauma 2 months back due to hit by some heavy object.

Physical examination found pupil of normal size and normal reaction to light and normal neurological status with Glasgow Coma Scale (GCS) score 14. CT scan was performed which showed a hyperdense left frontal chronic extradural/subdural mass lesion [Figure 1] and which was characteristically biconvex in shape, and in a position typical for an epidural hematoma. A midline shift (8 mm) on CT revealed the evidence of a mass effect on the adjacent brain and the ventricular system.

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Case Report

Unfortunately no intravenous contrast was given. Due to the clinical signs of mass effect the patient underwent an emergency left frontal craniotomy which revealed intradural lesion as a gelatinous solid tissue with no evidence of epidural hemorrhage. The mass was not vascular, grayish white in color. The lesion was completely excised, and the skull and bone flap was replaced. Postoperatively she promptly recovered to a GCS of 15 without a focal neurological deficit.

Diagnostic tests

The histopathological report was plasmacytoma [Figure 2]. On histopathology, the tumor cells resembled plasma cells and were immunopositive for CD138 and MUM-1 and were kappa light chain restricted. They were negative for CD20 and CD56. The blood counts, erythrocyte sedimentation rate, and radiological skeletal survey were normal. The postoperative period was uneventful, and the patient was discharged but without radiation therapy and adjuvant chemotherapy for private reasons.

Discussion

Plasmacytoma of skull is a rare finding.[1] Total surgical resection followed by adjunctive radiation therapy has been advocated as

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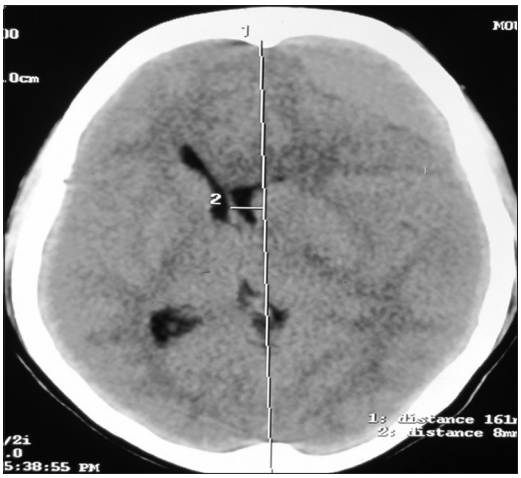

Figure 1: A 27-year-old, female presented with history of a headache, vomiting with history of head trauma 2 months back with above computed tomography scan finding with normal neurological examination

an effective treatment in the majority of skull plasmacytomas,[1] because these tumors are considered to be very radiosensitive.[2] The above treatment strategy provides the adequate control of the disease and decreases the possibility of recurrence.[3] Therefore, it is important to increase awareness of the clinical manifestation combined with neuroradiological findings. The diagnosis of solitary plasmacytoma can be made only when there is no evidence of multiple myeloma based on the bone marrow aspiration, electrophoresis of serum and urine protein, and no other lesion on the complete skeletal survey.[4,5] Arienta *et al*. reported that if total resection has been achieved then radiotherapy should be reserved for the case of tumor recurrence.[6] There are reports of complete cure after biopsy and radiotherapy, because plasma cell neoplasm are exquisitely radiosensitive.[7]

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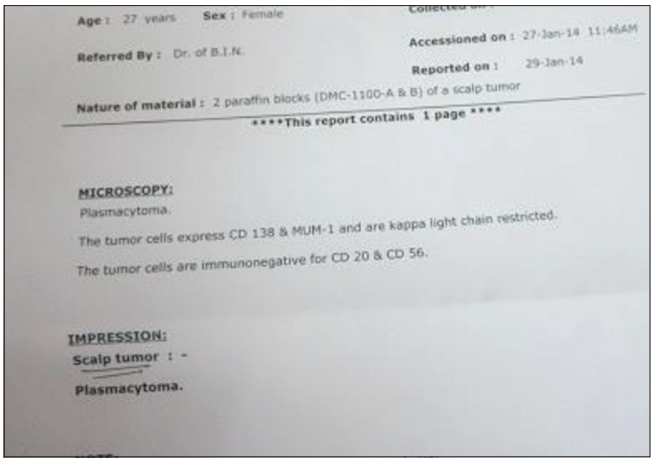
Age : 27 years Sex : Female

Referred By : Dr. of B.I.N.

Accessioned on : 27-Jan-14 11:46AM

Reported on : 29-Jan-14

Nature of material : 2 paraffin blocks (DMC-1100-A & B) of a scalp tumor

****This report contains 1 page ****

MICROSCOPY:

Plasmacytoma.

The tumor cells express CD 138 & MUM-1 and are kappa light chain restricted.

The tumor cells are immunonegative for CD 20 & CD 56.

IMPRESSION:

Scalp tumor : -

Plasmacytoma.

Figure 2: Microscopy and immunohistochemistry report

Conflicts of interest

There are no conflicts of interest.

References

1. Singh AD, Chacko AG, Chacko G, Rajshekhar V. Plasma cell tumors of the skull. Surg Neurol 2005;64:434-8.
2. Patel AJ, Adams GJ, Humphries WE, Rao VY, Fox BD, Fridley J, *et al.* Multiple myeloma presenting as solitary mass in the posterior fossa. J Clin Neurosci 2010;17:1457-9.
3. Yetiser S, Talas D, Akkaya A, Deveci S. Plasmacytoma of the temporal bone: Management with a combination of surgery and radiotherapy. Acta Otolaryngol 2001;121:915-8.
4. Du Preez JH, Branca EP. Plasmacytoma of the skull: Case reports. Neurosurgery 1991;29:902-6.
5. Jacquet G, Vuillier J, Viennet A, Godard J, Steimle R. Solitary plasmacytoma simulating pituitary adenoma. Neurochirurgie 1991;37:67-71.
6. Arienta C, Caroli M, Ceretti L, Villani R. Solitary plasmacytoma of the calvarium: Two cases treated by operation alone. Neurosurgery 1987;21:560-3.
7. Strojan P, Soba E, Lamovec J, Munda A. Extramedullary plasmacytoma: Clinical and histopathologic study. Int J Radiat Oncol Biol Phys 2002;53:692-701.