



A Rare Clinical Entity: Pineal Apoplexy

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Abstract

Pineal apoplexy is a rare clinical entity. Here we are reporting a case of pineal apoplexy who presented with headache, vomiting and altered sensorium. Neuroimaging of head revealed hemorrhage in pineal gland with hydrocephalus. Patient was managed conservatively.

Keywords: *Pineal gland, Apoplexy, Obstructive hydrocephalus.*

Introduction

Pineal apoplexy is rare clinical entity that is characterized by acute onset headache, nausea, vomiting, gaze paresis and ataxia. These clinical manifestations are secondary to obstructive hydrocephalus and compression on mid brain, tectum or cerebellum.^{1,2} We are reporting a case of hemorrhage in pineal region and associated obstructive hydrocephalus.

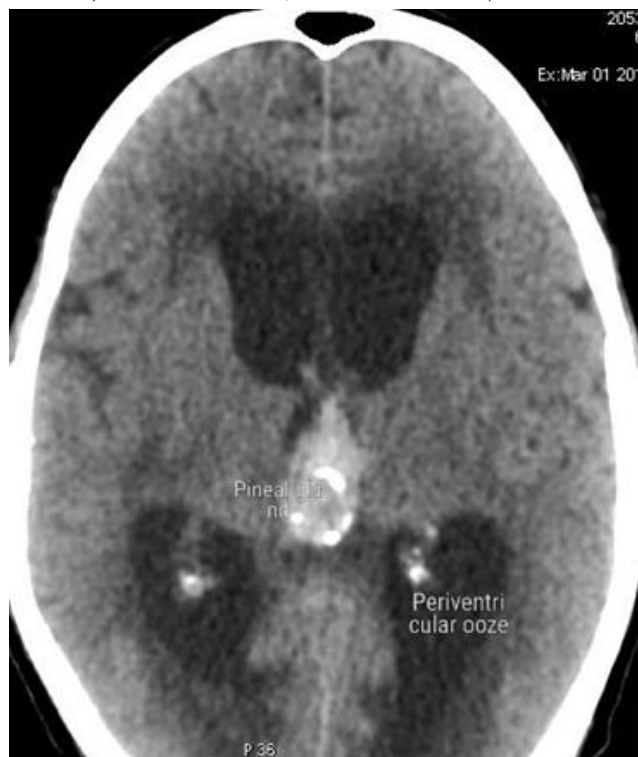
Case Report

A 65 year old man presented in emergency department with acute onset headache, vomiting for 3 days and altered sensorium for 1 day. There was no history of fever, seizure and behavioural abnormality. There was no past history of diabetes mellitus and hypertension. There was no history of any neurosurgical procedure in past. At admission his pulse rate was 64/m, blood pressure was 162/90 mmHg and he was maintaining oxygen saturation on

oxygen. Both pupils were small in size and sluggishly reacting to light. Tone was decreased in all 4 limbs. Deep tendon reflexes were diminished in all 4 limbs and plantar reflex was bilaterally extensor. All other systems were within normal limits. Patient underwent urgent computerized tomography of head which revealed hyperdense area (3.3 x 1.7 x 1.8 cm) in the pineal gland region with compression on mid brain leading to acute hydrocephalus and periventricular moderate ooze.

Next day of admission patient developed respiratory distress and low oxygen saturation, for this patient was intubated and kept on mechanical ventilation. But within few hours patient expired. On investigation haematological parameters showed Hb: 13.4 gm%, TLC: 12,100 / mm³, DLC: P74 L23 E2 M1. Random blood sugar: 118 mg/dl, Blood Urea: 40 mg/dl, Serum creatinine: 1.1 mg./dl, Serum bilirubin:

1.0 mg/dl, Liver enzymes were within normal limits (ALT : 38 U/L, AST : 40 U/L).



Discussion

Pineal apoplexy, a poorly understood phenomenon, is characterized by acute onset neurological syndrome caused by intratumoral haemorrhage with pineal gland region.^{1, 2} Common clinical manifestations of pineal apoplectic syndrome are headache and upward gaze palsy that are reported in more than 74% of affected patients². Other clinical features are nausea, vomiting, ataxia and syncope, that are found in > 20% of the affected patients.² The association of pineal apoplexy with ventricular peritoneal shunt (VPS) placement and anticoagulation therapy has been reported.^{3,5} In literature, few cases of pineal apoplexy have been reported. Steinbok et al⁴ reported a case of pineal apoplexy associated with pineocytoma who presented with headache, upward conjugate gaze palsy, neck stiffness and slow pupillary responses. Matsumoto et al⁵ reported a case of pineal apoplexy associated with pineocytoma who presented with lethargy and upward conjugate gaze palsy. In this case

the predisposing factor was ventriculo peritoneal shunt (VPS) insertion. When there is hydrocephalus on neuroimaging of brain (CT scan/MRI) procedures like External ventricular drain (EVD), Ventriculo peritoneal shunt (VPS), Ventriculo atrial shunt (VAS) to be done to relieve raised intracranial tension. If there is evidence of pineal parenchymal tumor, resection of pineal tumor or radiation therapy are options as specific treatment.

References

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