Tuberculous granuloma of the sphenoid-clival region

Sir;

The clivus is one of the common sites for diverse pathological lesions.\(^1\) Tuberculosis commonly involves the craniovertebral junction causing atlanto-axial dislocation.\(^2\) However, primary skull base tuberculoma is extremely rare.\(^3\) A case of primary sphenoid-clival tuberculoma without involvement of the craniovertebral junction is reported and the management is discussed.

A 24-year-old, non-immunocompromised lady presented with history of progressive diplopia and inward deviation of both eyes for one month. Cranial nerve examination revealed paresis of both lateral recti. The rest of the neurological and systemic examination revealed no abnormality.

Her hematological and laboratory examination revealed no abnormality. Chest X-ray was normal. CT scan revealed evidence of an isodense, minimally enhancing, destructive and expansive clival lesion (Figure 1). T1-weighted MRI images showed an isointense lesion involving primarily the clivus and sphenoid sinus and extending anteriorly into the nasopharynx. The lesion enhanced on Gadolinium. There was a central zone of necrosis. The craniovertebral junction was normal (Figure 2).

The patient underwent a trans-ethmoidal decompression of the lesion. The lesion was firm in the periphery and was vascular. However, the central part of the tumor was cheesy and avascular. Histopathological examination of the specimen revealed characteristic features of a tuberculoma with Langerhan’s giant cells and epithelioid cells. Acid-fast bacilli could not be isolated. Postoperatively, the patient was treated with antituberculous treatment [ATT]. The patient progressively improved and her abducens nerve function recovered completely. ATT was continued for 18 months. Repeat cranial CT scan showed complete disappearance of the lesion.

Tuberculosis commonly involves the craniovertebral junction causing atlanto-axial dislocation.\(^2\) Tuberculosis involving the clivus and sparing the craniovertebral junction is rare.\(^1,3\) The mycobacterium usually reaches the bone by hematogenous spread from a focus, usually in the lung.\(^4,5\) Although the exact mode of transmission of the mycobacterium is unclear, it could have been from the pharyngeal lymphoid tissues. Unlike the characteristic ring enhancement seen in cerebral parenchymal tuberculoma, skull base tuberculoma shows a diffuse enhancement and imaging characters mimic a malignant tumor, making the diagnosis of tuberculosis difficult.\(^4\) Intraoperative frozen section examination can help in determining the surgical strategy. A high degree of clinical suspicion is also mandatory.

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References

Calcified occipital glioblastoma

Sir,

A rare case of a glioblastoma having areas of calcification is reported. The relevant literature is briefly reviewed.

An 18-year-old-boy was admitted with a one-month history of bifrontal headache, intermittent vomiting and diplopia. He had history of seizures since the age of four years. The seizures were not preceded by any aura and the ictus consisted of a blank expression lasting for a few seconds. His scholastic performance had been average. Clinical examination revealed bilateral abducens paresis and mild papilledema. There was right-sided homonymous hemianopia. There was no cognitive deficit, disconnection syndrome or motor weakness. Skull radiograph and CT (Figure 1) done three years earlier had revealed calcification at the left occipital pole, without any mass effect. CT done at the time of present admission showed a large, mixed, attenuating and partly enhancing lesion at the left occipital pole having areas of calcification.

Left occipital craniotomy and a radical resection of the tumor-bearing occipital pole was carried out. The tumor was firm, solid and gritty and was not very vascular. The postoperative period was uneventful. Histopathology revealed a highly cellular tumor made up of anaplastic and pleomorphic cells with several mitotic figures and bizarre giant cells. Astrocytic proliferation was seen in the peripheral areas. There were areas of necrosis with palisading of nuclei and angioendothelial proliferation. Many areas of calcification were seen. The tumor was positive for glial fibrillary acid protein (GFAP). A diagnosis of glioblastoma multiforme with calcification was made. The lesion was then subjected to radiotherapy and chemotherapy. The patient was free from recurrence for three years after surgery, after which he was lost to follow-up.

Calcification may be seen in gliomas, especially in oligodendrogliomas and in mixed gliomas that have a benign histological appearance. It is unusual in high grade astrocytomas and glioblastomas; it is likely that some part of the previously low grade tumor may dedifferentiate into glioblastoma. Histological markers suggesting a better prognosis in glioblastomas include presence of giant cells and differentiation. The presence of calcium deposits has rarely been recorded.

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References

Acute inflammatory demyelinating polyneuropathy following plasmodium vivax malaria

Sir,

Acute Inflammatory Demyelinating Polyneuropathy (AIDP), seen following viral, bacterial infections or immunization, is uncommon following parasitic infection. We could locate 11 cases of Guillain Barre Syndrome (GBS) following malarial illness from the literature. Eight of these cases were following P. Falciparum infection and three were following P. Vivax infection. We report a case of AIDP / GBS following P. Vivax malaria that needed ventilatory support.

A 39-year-old male developed fever with chill and rigor. His hematological examination showed ring forms of P. vivax. He was treated with chloroquine (total 1500mg base) and pri-