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Primary Meningeal T-Cell Lymphoma at the Clivus Mimicking a Meningioma

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Key words
- Clivus
- Lymphoma
- Meningioma
- Skull base

Abbreviations and Acronyms
CN: Cranial nerve
CNS: Central nervous system
CSF: Cerebrospinal fluid
CT: Computed tomography
MRI: Magnetic resonance imaging
PCNSL: Primary lymphoma of the central nervous system

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BACKGROUND: **Most primary lymphomas of the central nervous system (CNS) are of B-cell origin and are found intra-axially, with a few reported cases of skull base tumors involving the upper clivus or sellar region or both. In this case, a tumor resembling a clivus meningioma without osseous involvement was surgically removed and turned out to be a primary T-cell lymphoma.**

CASE REPORT: **A 60-year-old woman presented with slight right-sided abducens nerve palsy. Cranial imaging revealed an extra-axial mass at the caudal clivus resembling a meningioma. The tumor was removed surgically; smear preparations obtained intraoperatively were inconclusive presumably because of preoperative steroid treatment. The final diagnosis was peripheral T-cell lymphoma, not otherwise unspecified. The patient developed a secondary meningiosis supposedly caused by surgery.**

CONCLUSIONS: **Although a very rare entity among primary T-cell lymphomas of the CNS, these tumors also can occur as skull base lesions without involvement of the bone. Preoperative steroid medication may complicate intraoperative histologic assessment and lead to inadequate treatment of these tumors.**

BACKGROUND

Primary lymphomas of the skull base are uncommon. Few reports describe clivus lymphomas, most of them involving the apical part of the clivus with extension into the cavernous sinus and sellar region (1, 6, 9). Surgery for lymphomas of the skull base usually is restricted to obtaining biopsy specimens. We report the first case, to our knowledge, of a peripheral T-cell lymphoma at the skull base resembling a meningioma.

CASE REPORT

A 60-year-old woman was admitted for evaluation and treatment of a common hepatic duct stenosis, which was discovered during a routine checkup that showed elevation of liver parameters. On admission, clinical and laboratory examinations were normal except for slight elevations of aspartate ami-

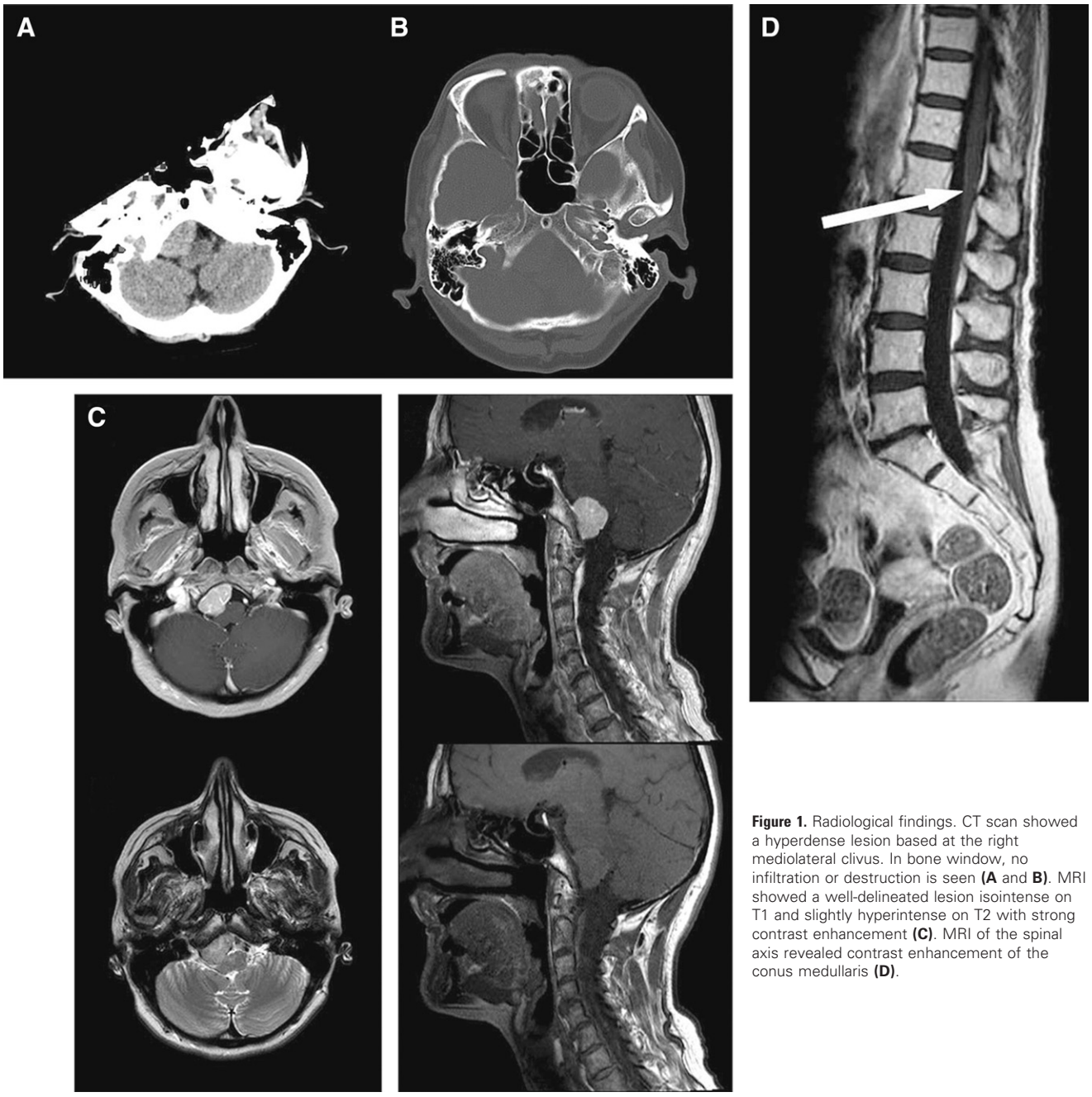

Figure 1. Radiological findings. CT scan showed a hyperdense lesion based at the right mediolateral clivus. In bone window, no infiltration or destruction is seen **(A** and **B)**. MRI showed a well-delineated lesion isointense on T1 and slightly hyperintense on T2 with strong contrast enhancement **(C)**. MRI of the spinal axis revealed contrast enhancement of the conus medullaris **(D)**.

notransferase, alanine aminotransferase, gamma-glutamyl transferase, and alkaline phosphatase. Abdominal magnetic resonance imaging (MRI) showed a slight hepatic cholestasis and a suspicious soft tissue formation along the common hepatic duct. Based on the radiological differential diagnosis of a Klatskin tumor, surgical exploration was initiated. The suspected tumor was excised; on pathologic work-up, the tumor specimen showed only benign ductal hyperplasia. Duct stenosis was treated by insertion of a stent with subsequent normalization of laboratory parameters.

During postoperative recovery, the patient complained of new-onset intermittent diplopia. These symptoms first had occurred for a few hours and had disappeared spontaneously during the night. On the following day, diplopia developed again during evening hours and did not resolve. Neurologic assessment and an optic examination showed discrete right abducens nerve palsy but no other neurologic deficits.

A cranial computed tomography (CT) scan revealed an extra-axial mass located mediolaterally on the caudal clivus without osseous infiltration or destruction (**Figure 1, A** and **B**). Cranial MRI showed a homogeneously enhancing, well-circumscribed,