

Teaching NeuroImage: Syringomyelia Secondary to Posterior Fossa en Plaque Meningioma

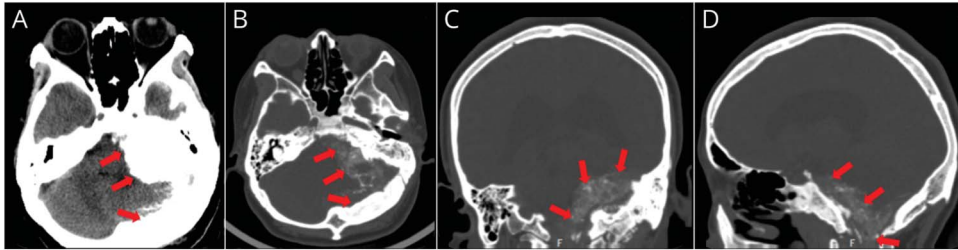
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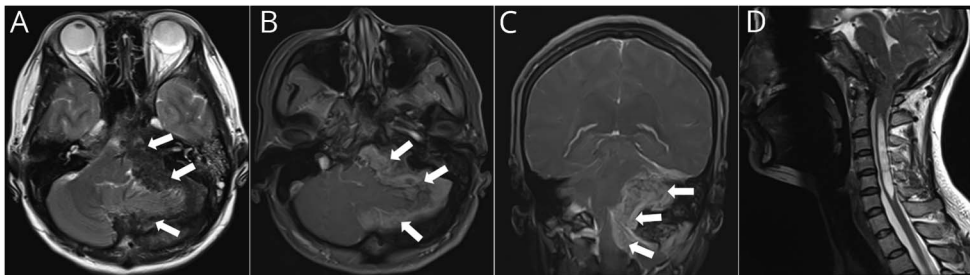
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Figure 1 Brain CT



Axial brain windows (A), axial bone windows (B), coronal (C), and sagittal (D) CT show considerable thickening of the left occipital and temporal bones, which is highly suggestive of fibrous dysplasia (red arrows).

Figure 2 Brain MRI



Axial T2-weighted (A), axial postgadolinium T1-weighted (B), and coronal postgadolinium T1-weighted (C) images show a giant posterior fossa lesion. The posterior fossa volume decreased secondary to mass effect of the lesion. The fourth ventricle, brainstem, and left cerebellum are severely compressed. Sagittal T2-weighted (D) image reveals syringomyelia within the intramedullary cavity extends from C2–C6. The imaging features indicate that the lesion is likely to be a slower growing extra-axial lesion as opposed to a more rapidly growing and/or intramedullary lesion.

A 36-year-old woman presented with a 2-year history of unsteady walking. Examination showed hoarse voice and weakness of the left shoulder. CT revealed thickening of the left occipital and temporal bones (Figure 1), which was thought to be fibrous dysplasia. Brain MRI demonstrated a giant posterior fossa lesion and cervical syringomyelia (Figure 2). The lesion was noted to involve dura mater. Subtotal resection was performed. Pathology confirmed the diagnosis of en plaque meningioma (WHO grade I). Cell proliferation index Ki-67 was 2%. En plaque

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meningioma is a rare subtype of meningioma characterized by “sheet-like” patterns of growth.¹ Significant hyperostosis is often observed.

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Shengqi Zhao, MD	Department of Neurosurgery, the First Affiliated Hospital of Zhengzhou University, Zhengzhou, China	Drafting/revision of the manuscript for content, including medical writing for content

Appendix (continued)

Name	Location	Contribution
Yan Hu, MD	Department of Neurosurgery, the First Affiliated Hospital of Zhengzhou University, Zhengzhou, China	Major role in the acquisition of data
Yuchao Zuo, MD	Department of Neurosurgery, the First Affiliated Hospital of Zhengzhou University, Zhengzhou, China	Major role in the acquisition of data
Peichao Zhao, MD	Department of Neurosurgery, the First Affiliated Hospital of Zhengzhou University, Zhengzhou, China	Major role in the acquisition of data
Fuyou Guo, MD	Department of Neurosurgery, the First Affiliated Hospital of Zhengzhou University, Zhengzhou, China	Drafting/revision of the manuscript for content, including medical writing for content, and study concept or design

Reference

1. Shapiro S, Cassis A. Differentiating hyperostotic temporal bone meningioma en plaque and fibrous dysplasia on computed tomographic imaging. *JAMA Otolaryngol Head Neck Surg.* 2017;143(3):316-317.

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