

Symptomatic left intradiploic encephalocele

A 50-year-old man developed right upper extremity weakness after a violent coughing spell. Imaging studies (figure 1, A and B) demonstrated a large fluid-filled calvarial defect containing herniated brain near the level of the motor cortex. The brain tissue which was “strangulated” by ossified dura while protruding into the calvarial defect was decompressed (figure 2), with resultant substantial progressive though incomplete clinical improvement. Intradiploic encephaloceles are rare.¹ We hypothesize that, in our patient, the paroxysmal increase in intracranial pressure associated with the violent cough resulted in further herniation of the brain already protruding through a defect, resulting in his symptoms.

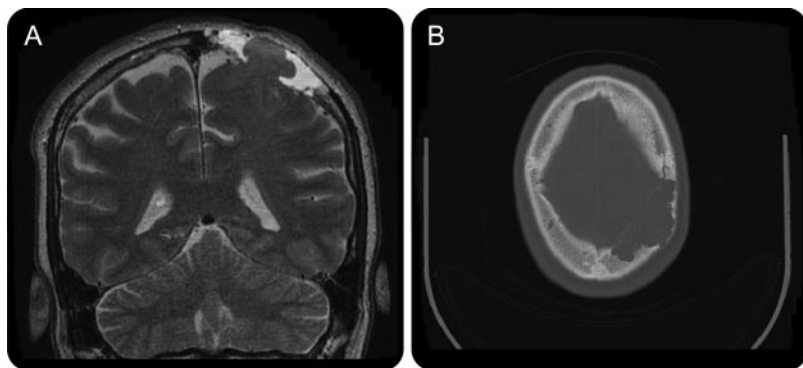
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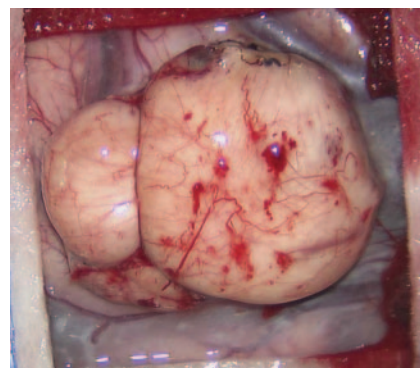
1. Kosnik EJ, Meagher JN, Quenemoen LR. Parietal intradiploic encephalocele: case report. *J Neurosurg* 1976;44:617–619.

Figure 1 Imaging



(A) Coronal T2-weighted MRI. A 6-cm fluid-filled parietal calvarial defect contains a small amount of herniated posterosuperior left frontal lobe. A mild amount of gliotic-type abnormal T2 signal in the herniated and underlying frontal lobe is present. Mild superior retraction of the underlying intracranial frontal lobe is seen. (B) Axial bone algorithm CT. Two-centimeter inner table parietal calvarial defect is noted, with scalloped margins of the larger cystic intradiploic calvarial lesion. There is marked thinning of the outer table of the calvarium.

Figure 2 Intraoperative picture



Herniating brain parenchyma after removal of the thinned outer cortical calvarial layer and resection of the ossified dura encircling the herniated brain substance. (Top is anterior, left is medial toward the superior sagittal sinus.) The herniated brain was found along the motor strip.

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