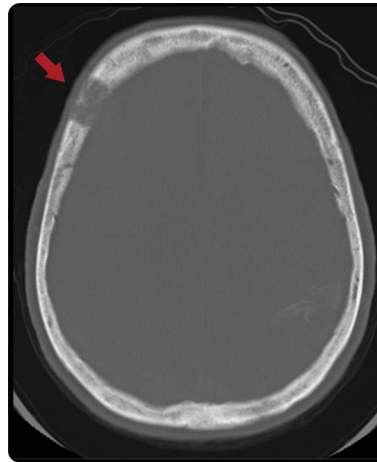


Teaching NeuroImages: EEG pattern associated with a skull osteolytic lesion in breast cancer

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Figure 1 CT head study



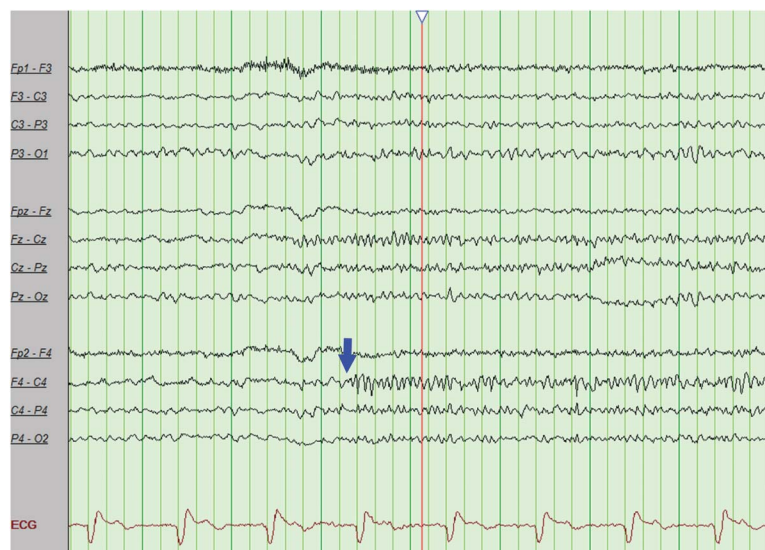
Large osteolytic lesion in the right frontal bone. Calcification in the left superior parietal lobe is secondary to prior infarction.

An 84-year-old woman had recurrent spells of right upper limb weakness and numbness. There were prior left parietal and right occipital strokes and metastatic breast cancer with skull

involvement (figures 1 and 2). The diagnosis was focal epilepsy.

Breach effect is defined as a focal increase in amplitude of α , β , and μ rhythms detected at or near the site

Figure 2 EEG recording



High-amplitude, high-frequency activity confined to the right frontocentral region consistent with breach rhythm.

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From the Mayo Clinic, Rochester, MN.

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of a bony skull defect,¹ usually seen with surgical skull defects but also with osteolytic lesions of the skull.² There is no association with epilepsy, but the EEG alteration may be confused with focal epileptiform discharges.

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