eFigure 1. The subtle bottom-of-sulcus dysplasia of the patient on **(A)** axial T1, **(B)** sagittal T1 and **(C)** coronal T1 3-tesla MRI images. **(D)** PET-MRI registration revealed mild hypometabolism at the depth of the postcentral sulcus. The suspected lesion was circled in red.

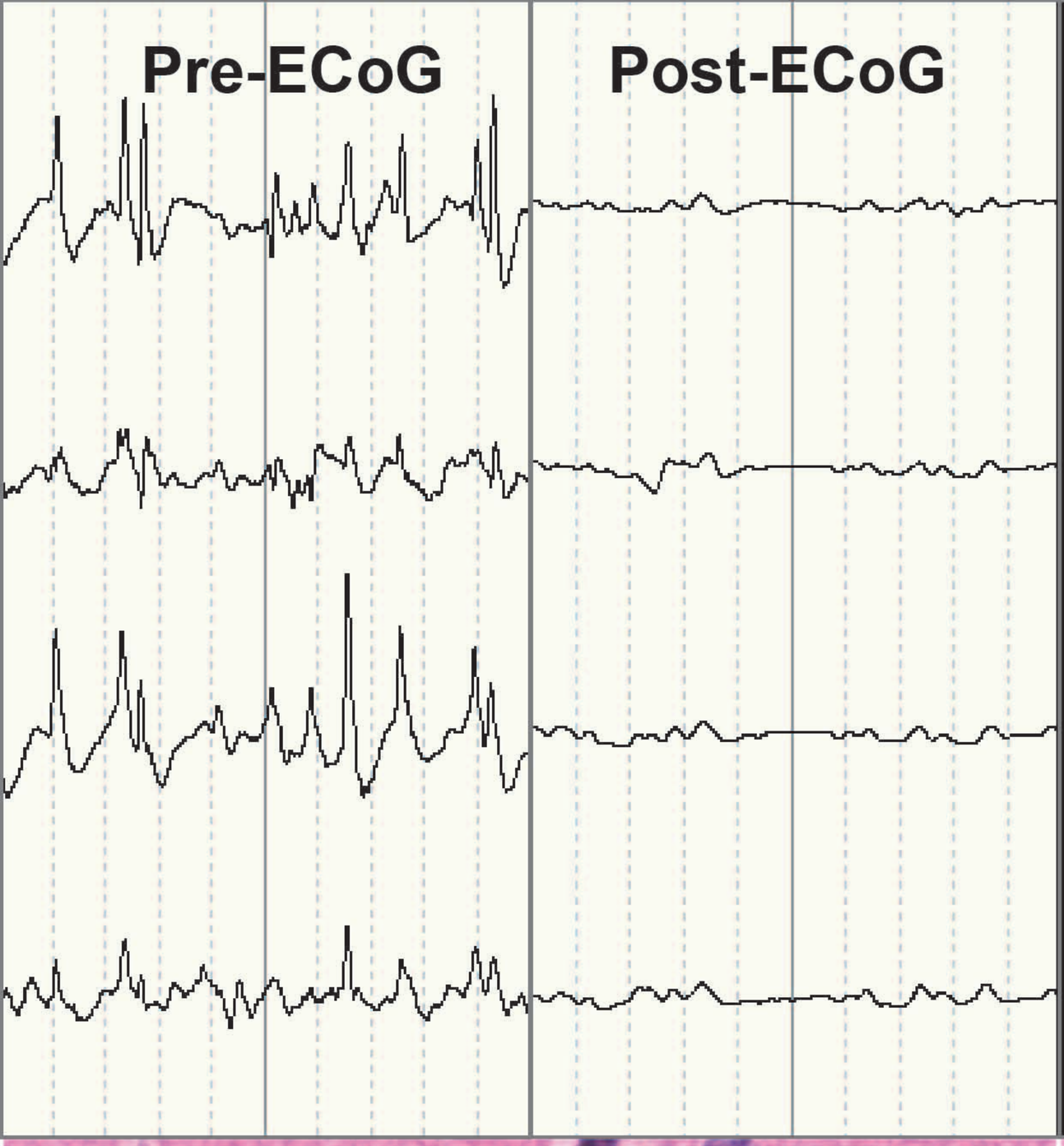
A

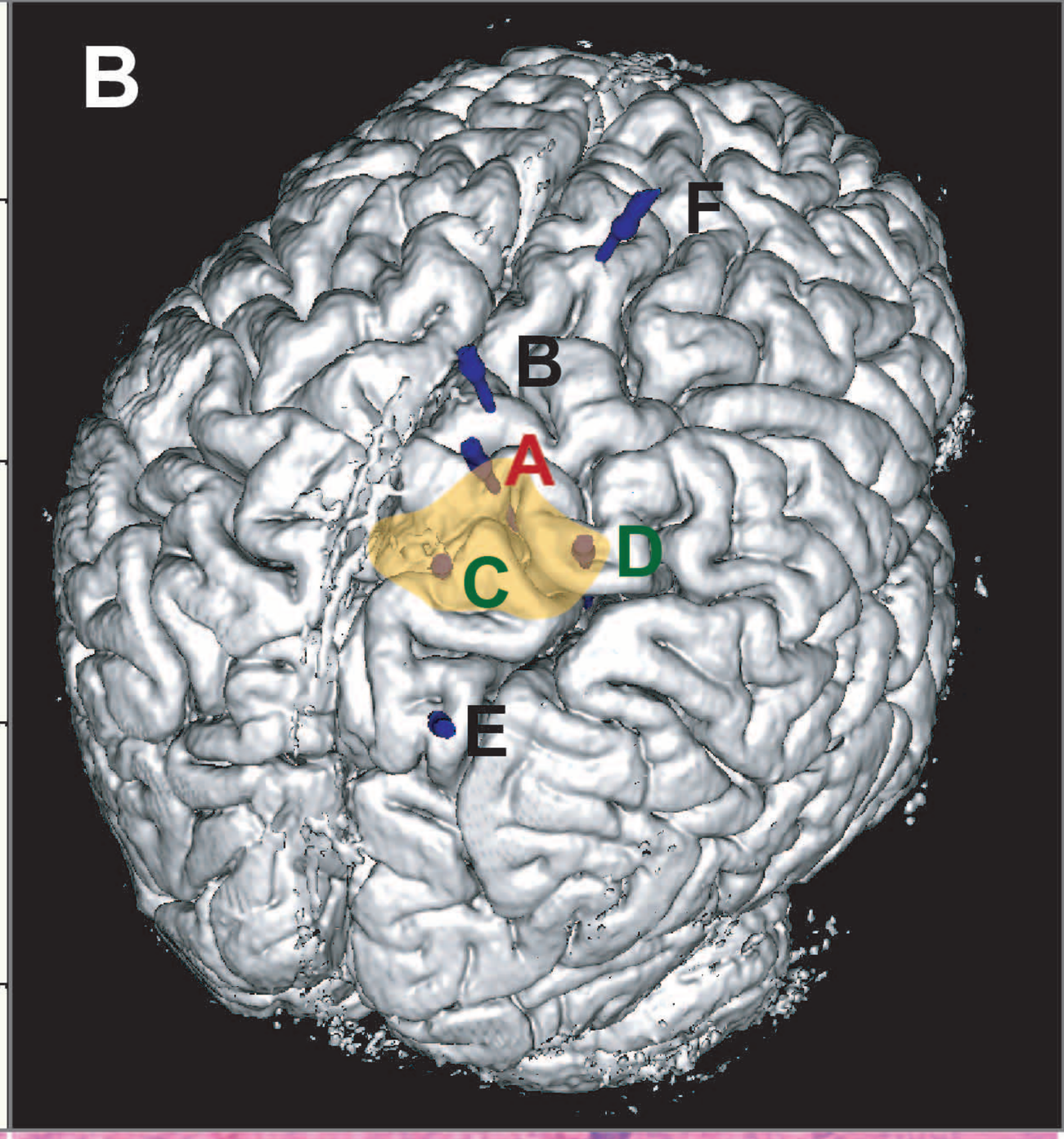
B

C

D

eFigure 2. **(A)** (left panel) Pre-resection electrocorticography (ECoG) with a cortical grid (Timebase 30mm/sec, Sensitivity 300μV/cm) showed rhythmic bursting of spikes/polyspikes over the postcentral gyri. (right panel) Post-resection ECoG showed absence of rhythmic bursting. **(B)** Personalized volumetric reconstruction displayed the stereotactic localization of the 6 intracerebral electrodes, all on the right side (A: the postcentral sulci [suspected epileptogenic zone], B: central sulcus, C: superior parietal lobule, D: the lateral margin of the suspected epileptogenic zone, E: precuneus and F: supplementary motor area). Electrodes A, C, D mark those with epileptic discharges in both the interictal or ictal periods. We also performed functional mapping with electrical stimulations. Direct stimulation of electrodes A1-4 (in red) produced the habitual attacks with electroencephalographic seizures. Stimulation of electrodes C4-7 (in green) and D5-7 (in green) produced after-discharges on EEG. The resected brain region was shown in yellow. Haematoxylin and eosin (H&E) staining showed **(C)** abundant dysmorphic neurons (black arrow) within the cortex at the bottom of postcentral sulci and **(D)** clusters of balloon cells (black arrowhead) along the grey-white matter junction. Scale bar = 25μm.


Pre-ECoG
Post-ECoG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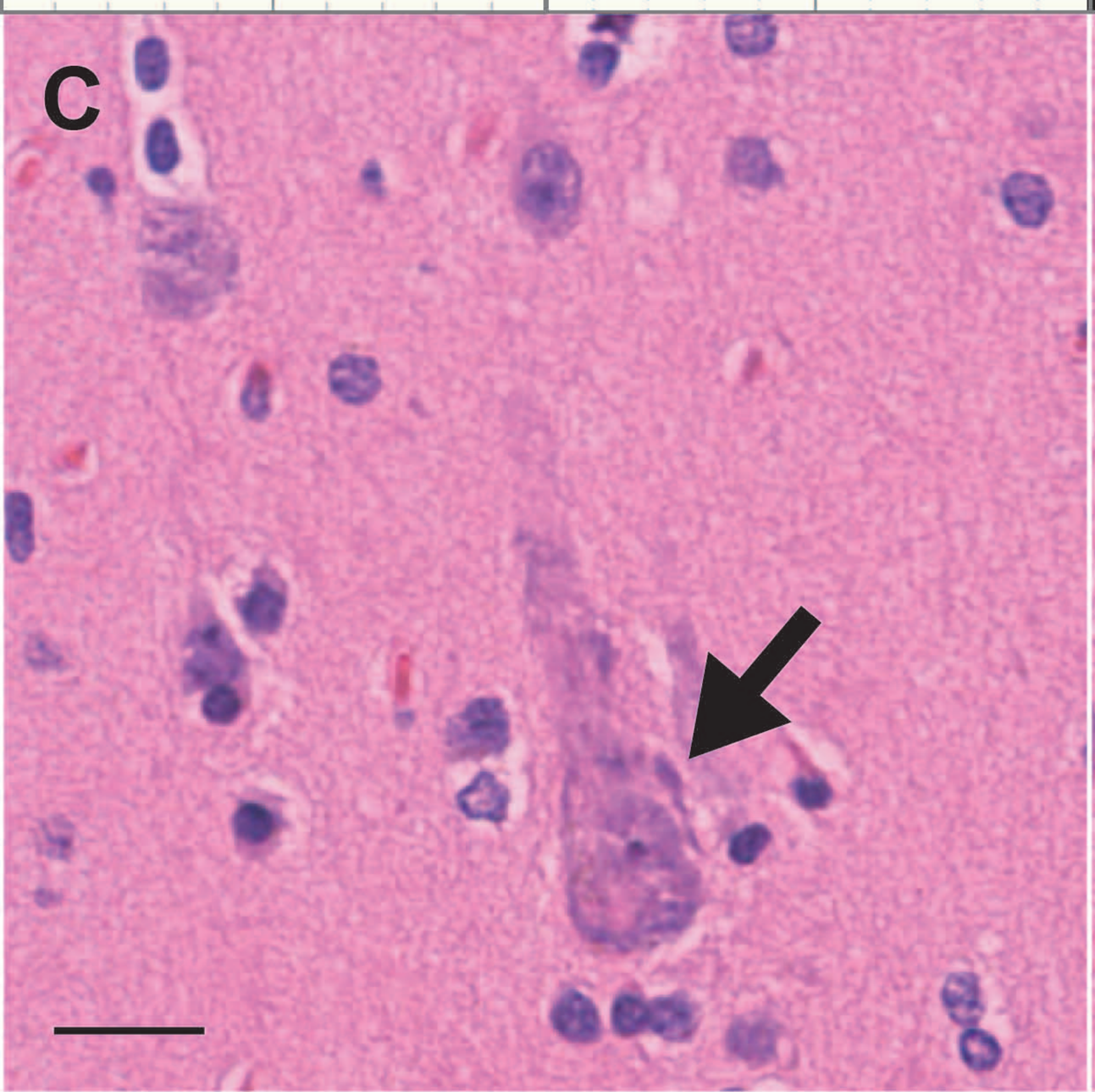
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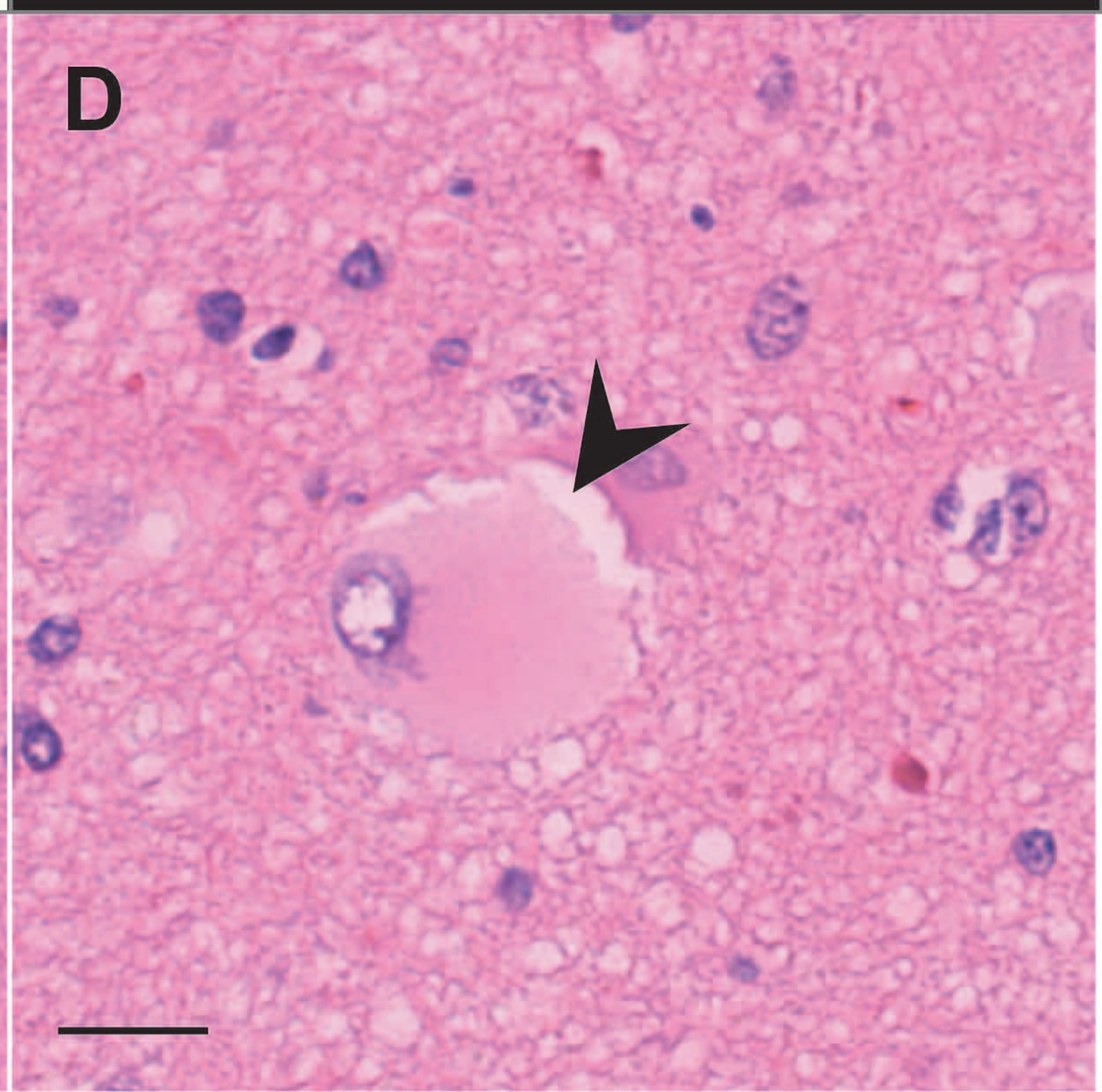
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