

Intraoperative ultrasound for focal cortical dysplasia

A homogeneous population of five patients with type IIb FCD was evaluated. Focal cortical thickening and cortical ribbon hyper-intensity, blurring of the grey-white matter junction and hyper-intensity of the subcortical white matter on T2-weighted/FLAIR images were present in all patients. Cortical features had a complete concordance between [intraoperative ultrasound](#) (ioUS) and MRI. In particular ioUS thickening and hyper-echogenicity of cortical ribbon were identified in all cases (100%). Contrary, hyper-echoic subcortical white matter was detected in 60% of the patients. IoUS images resulted in clearer lesion borders than MRI images.

The study confirms the potentials of ioUS as a valuable diagnostic tool to guide FCD surgeries ¹⁾.

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