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## Imaging of cortical dysplasia in a tertiary pediatric epilepsy center

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Neuroimaging is essential in the work-up of patients with intractable epilepsy. The ability to define focal cortical dysplasia (FCD) on MRI has considerably improved over the last 15 years with improvement in imaging technology and techniques. The identification of an epileptogenic area as a surgical target dramatically improves the postsurgical outcome and decreases morbidity. There are other techniques and modalities that have the potential to improve epileptogenic lesion identification, delineation and characterization. Most of these involve the use of MRI co-registration for anatomical localization. Imaging modalities include fMRI, EEG-fMRI, diffusion tractography, FDG-PET, 99mTc-HMPAO SPECT and MEG. Many techniques remain research-based and require a team of experts to process, interpret and amalgamate the information in order to form a complete imaging picture for each individual patient. This talk will cover imaging features of cortical dysplasia using examples from the Children's Epilepsy Program at the Royal Children's Hospital, Melbourne.

### Biography

Simone Mandelstam is a Senior Specialist Radiologist at the Royal Children's Hospital in Melbourne and an Associate Professor of Radiology and Pediatrics at The University of Melbourne. She specializes in Neuroimaging and is a Clinical and Research Epilepsy Radiologist with over 35 peer-reviewed publications. She is a Research Radiologist at the Florey Institute of Neuroscience and Mental Health and is involved in many research collaborations on the imaging of genetic epilepsies and brain malformations.

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