

## **ABSTRACT**

Children with focal intractable epilepsy caused by MCD, FCD and TSC are in a high risk of development of cognitive delay, as a result of both drug resistant epilepsy and genetically determined abnormal structure of the neuronal networks. Epilepsy surgery represents an established and safe treatment method of focal drug resistant epilepsy, and increases the chances for these patients to be rid of epileptic seizures, anti-epileptic medication and cognitive comorbidities. Current data on genetic background of focal MCD and FCD and their comorbidities provide space to expand the diagnostic process in epilepsy surgery candidates. However, available information on genetic causes of MCD and FCD do not allow us to infer prognostic estimates on chances of seizure freedom and optimal cognitive development. Future studies should elucidate these uncertainties.