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O-044 - CLINICAL AND ANATOMICAL ANALYSIS OF EPILEPTOGENIC SPREAD PATTERNS IN FOCAL CORTICAL DYSPLASIA PATIENTS

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Resumen

Introduction: Focal cortical dysplasia (FCD) is one of the main causes of intractable epilepsy, which is amendable by surgery. During the surgical management of FCD, the understanding of its epileptogenic foci, interconnections and spreading pathways is crucial for attaining a good postoperative seizure free outcome.

Objectives: The main goal of our study is to describe the clinical features and surgical results of a series of FCD patients and an anatomical correlation through cadaveric images, with a special effort to elucidate their relationship and the white fibers connections between FCD foci with their correlative ectopic epileptogenic zones.

Methods: We retrospectively evaluated 54 FCD patients. The EEG findings were correlated to brain anatomical areas. Subsequently, we analyzed the main white matter tracts implicated during the epileptogenic spreading in some representative cases. We prepared 10 human hemispheres using Klinger's method and dissected them through the fiber dissection technique.

Results: We illustratively described the main white matter tracts implicated in the seizure spread in 10 patients. Respective FCD foci, interconnections and ectopic epileptogenic areas in each patient were discussed.

Conclusions: A strong understanding of the main implicated tracts in epileptogenic spread in FCD patient remains cardinal for neurosurgeons dealing with epilepsy. In order to achieve meaningful seizure freedom, despite the focal lesion resection, the interconnections and tracts should be understood and disconnected to stop the spreading.