Bridging the Validation Gap in Diagnostic Methods — Future Plans of the Commission on Diagnostic Methods

Ingmar Blümcke, Diagnostic Methods Commission Chair

Our Commission covers major diagnostic modalities to clinically characterize a patient’s epilepsy, namely electro-/neurophysiology, neuropsychology, imaging and neuropathology measures. Our objective is to provide standardized protocols, terminology use and guidelines for an cost-effective diagnosis of epilepsy and their related comorbidities as well as consensus classification systems for underlying etiologies. We have set up four Task Forces to achieve this goal, and to bridge the validation gap of increasingly available technologies in the community of clinical epileptology.

Consensus terminology use, protocols, and guidelines for minimum requirements to apply neurophysiology measures are a major topic for our Commission (Task Force for Neurophysiology, Chaired by Philippe Kahané, Genobole, France). Increased interest for invasive EEG methodologies also requires practice parameters or criteria that determine clinical indications for intracranial EEG monitoring and will be shared with the ILAE community. However invasive EEG recordings are increasingly used in patients with “MRI-neg-ative” focal epilepsies. This term needs a better definition to allow comparison between different centers and published patient series (Task Force for Neuroimaging, Chaired by Andrea Bernasconi, Montréal, Canada). Our Commission follows the strategy to validate any new definition using a pathology-based approach and consensus classification systems. Good examples are our recent Focal Cortical Dysplasia and Hippocampal Sclerosis classification systems proposed by the Commission in 2011 and 2013.

Our next term’s challenge in Neuropathology addresses tumor-related epilepsies (Task Force for Neuropathology, Chaired by Ingmar Blümcke, Erlangen, Germany). Neuropathology agreement studies have shown dramatic interrater variance in the classification of these specific group of brain tumors associated with long-term epilepsies (LEAT). LEATs mostly encompass glio-neuronal tumors, i.e. gangli-agliomas (GG) and Dyssembryoplastic Neuroepithelial Tumors (DNT) (approx. 60-80%). Despite their histopathologic definition in the WHO classification of brain tumors (2007), the frequency of DNT and GG vary largely between individual case series. We have built a collaborative virtual microscopy platform, which allows us to review unlimited series of LEAT variants by a panel of international neuropathologists and to encourage discussion between WHO, Intf. Neuropathology, and ILAE communities to achieve consensus terminology use and acceptance of a revised tumor classification system.

An important aspect of our Commission’s work will address neurepsychology measures during presurgical evaluation to be understandable for epileptologists when using or interpreting different test domains (Task Force for Neuropsychology chaired by Sarah Wilson, Melbourne, Australia). Particular topics will address measures for assessment of developmental hindrance, measures sensitive to antiepileptic drug treatment or sensitive to EEG pathol-
The Education Commission Activity Report

Jaime Carrizosa, Education Commission Chair

The Commission on Education was established to support and enhance the education of healthcare professionals with accurate and up-to-date information about epilepsy, its causes and care that is appropriate for the geographic setting in which it is given. In addition, the Commission works to bring advanced skills such as clinical neurophysiology to areas where it doesn’t exist. One of the main working areas of the Education Commission for this term is the collection and analysis of the projects and results of different educational efforts at every level of education. We will evaluate objectives, contents, didactic strategies and impact, so that the experience of one group could serve as an example to help guide educational efforts for other groups and regions that have interests in epilepsy education.

Appropriate education about epilepsy for the general community, families, and persons with epilepsy as well as undergraduate and postgraduate students is a major concern for the Education Commission. Of equal importance is the continuous education for clinicians and paramedical personnel. We hope that at the end of the analysis of our programs that the best experiences in education could be identified, and that minimal contents or standards for specific educational programs can be established.

The acquisition of Epileptic Disorders and its designation as the educational journal of the ILAE is being reinforced. One approach to fulfilling its mission is presenting illustrative case studies and topics that can be helpful for clinicians in everyday work.

The courses of VIREPA have been well received and are ongoing during this year. The development of new courses that will be designed to the members’ interests will be considered in the near future. It is possible that we will see courses on Status Epilepticus, basic sciences and epilepsy in primary healthcare. ASEPA (Asia) and ALADE (Latin America) activities in their respective regions are of utmost importance. Their courses and overall involvement during Regional Congresses, summer schools on epilepsy, its causes and care for the geographic setting is of utmost importance. Their courses and overall involvement during Regional Congresses, summer schools on epilepsy, its causes and care for the geographic setting will have special emphasis on projects of underserved regions in Africa, Asia and Latin America.


ILAE Commission Chairs