Preface

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Why a book on Focal Cortical Dysplasias?

Although a lot have been done, and a large panel of experts have accumulated an impressive amount of data, we believe it is high time for a structured volume with the clear focus of combining data with the art and reflection of experts who have worked in the field for the last decades.

As we all know, papers are more and more succinct and objective, and often leave behind precious perspectives of experts who have faced different issues and reflected upon them over the years. When we thought about launching this initiative, the following came to our minds:

- 2021 marks the 50th anniversary of the famous description by Taylor and colleagues in 1971 of this bizarre lesion ("once seen, never forgotten!"). Thus, it is Taylor's type focal cortical dysplasia 50th birthday. Celebrating this event may help us check what has been done and where we are now. Let us look to the past with a look at improving the future.
- The field of FCD has witnessed an exponential advance in the last decades. Looking back 30 years, nobody could suspect that FCD would become perhaps the most relevant etiology of focal epilepsies in patients of all ages, particularly those with refractory seizures, nor that geneticists would unveil fascinating molecular mechanisms of production of dysplastic abnormalities that would be identified by ever improving skills of imaging specialists and their ingenious techniques. However, in the field of dysplasia – as in many others – there is a sort of disconnection between the fast production of knowledge and the pace of condensing and reporting such knowledge in a volume that is truly useful in the clinic.
- Despite major advances in all fields, FCD remain a mystery. More than ever, we must join efforts to better understand the mechanisms of epileptogenicity and the natural course of FCD, to recognize their many faces, and determine the best care. Curing epilepsy due to FCD should be our common challenge ("impossible n'est pas français!"). We are in the middle of the river, and the book may help us reach the other side.
- There are several unresolved issues and framing these aspects in a straightforward way may help clinicians to be attentive to further advances in the field. Why many patients with reasonably well controlled seizures suddenly become extremely refractory? Why surgical outcome is still not as good as we wish, despite better imaging and neurophysiology? Why may patients relapse many years after seizure freedom from apparently successful surgery? What is the effective functionality and plasticity of the dysplastic cortex and the "dysplastic brain"? How to determine the best trade-offs in FCD located around eloquent cortex, balancing resection of epileptogenic tissue with the need to preserve functionality? Should the surgical strategy be influenced by the histological FCD subtype? These and other questions need very focused approaches, from people producing knowledge that impacts patients around the world every day.
- Progress may include some disappointing outcomes. Elegant and audacious hypotheses have not been confirmed, while unlikely leads have opened the way to unsuspected findings. Some confusion may result from the divergent/contradictory advances, and we need clarifications about what is well established (no doubt), what remains to be further investigated and what should be abandoned.

Hence, we believe the time is ripe for a volume condensing the "practical knowledge" about FCD – knowledge that can be applied by clinicians taking care of the large number of patients with this epilepsy etiology worldwide.

We did our best for this book to be attractive, easy to read, well-illustrated and informative for clinicians searching a solution for their patients, as well as helpful for decision making. We hope readers will take this as a collaborative journey that, in the end, will help people at all levels to deal with patients with FCD.