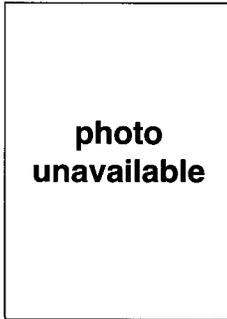


EVIDENCE-BASED MANAGEMENT OF EPILEPSY. 2011. By Steven C. Schachter. Published by tfm Publishing Ltd. 350 pages. C\$100 approx.

Rated ☆☆☆☆

The evidence-based approach to medical practice has become the standard of care over the last decade, with a long history of proponents predating its widespread acceptance. It has not been without contention, however, with some claiming that it limits the physician's freedom to tailor management to the individual patient's needs. Perhaps more than other specialties, the systematic study of neurologic diseases is difficult, culminating in a relative dearth of high-quality randomized studies to guide practice. In the care of patients with epilepsy, this allows freedom to practice the art of medical therapeutics with consideration of a number of patient factors, but may also lead to frequent guesswork or "trial and error" approaches. As the number of treatment options continues to grow, high quality evidence for their best application is needed.



Schachter and colleagues have attempted this and are to be commended on a thorough yet succinct review of the available evidence. The book is well-laid out and the style is consistent. A brief introduction discusses the application of evidence to clinical practice using grades and levels of evidence. Helpful features include a summary of key points at the end of each chapter, and levels/grades of evidence accompanying each statement, both within the text and in the chapter summaries. This becomes somewhat redundant when reading the book in total, but as a reference will be a useful addition.

Without a doubt, the single most important contribution of this book is highlighting the overall paucity of evidence for treatment approaches in epilepsy. Nonetheless the authors are able to extract useful guidance from the data available, and do not shy away from offering opinions based on relatively low level evidence based on their experience and insights (some chapters more than others). This highlights the fact that low level/grades of evidence are not without merit, and expert opinion is a valid expression of externally valid knowledge (level IV, grade C). A consistent theme throughout the book is emphasis on quality of life and comprehensive assessment of individual patient factors, making application of even high quality evidence a highly-tailored approach.

The chapters flow logically through initiation of treatment, monitoring, and how to recognize treatment failures. Surgical options and the evidence for their use are reviewed particularly well, and the emphasis for early consideration of temporal lobectomy for refractory patients is appropriately emphasized, based on overwhelming evidence of benefit with careful selection. Less clear evidence of benefit is available for vagal nerve stimulation, multiple subpial transections, and deep brain stimulation, but the available studies are accurately represented.

The next several chapters review specific populations requiring careful consideration, including pregnant women, patients with comorbid psychiatric disorders, and those with intellectual disabilities. Each of these provides practical, real-world advice,

often based on rather limited or low-level evidence. Conditions of the comorbid state, including headache, cardiovascular changes, and non-epileptic events, are well-covered in Chapter 6, and lead nicely into a discussion of sudden death (SUDEP), including strategies for prevention and evidence for potential mechanisms.

Another important contribution of this book is the recognition of a "treatment gap" in epilepsy, such that a significant number of patients continue to have recurrent seizures with all their inherent complications, despite the multitude of medical and surgical treatments available. The chapter from Sirven and colleagues describes potential reasons for this gap, and future directions for addressing it, including an intriguing discussion of closed-loop stimulators that are able to detect and abort seizures using a detection algorithm and automated stimulation in response to ictal activity. Reasonable evidence from one trial has shown favorable results using this technique, offering yet another option for refractory patients with non-lesional or bilateral foci.

Behavioural and complementary/alternative treatment modalities are well covered in Chapters 10 and 11, where a comprehensive, team-oriented approach is emphasized as a means to overall improved quality of life for patients with epilepsy. Chapter 12 highlights the challenges in treating seizures in patients with intellectual disability, including the frequent difficulty of recognizing seizures vs other behavioural episodes. Medical options are reviewed as they pertain specifically to this population, including those with Lennox-Gastaut and newer drugs such as rufinamide which offer new hope. Finally, a thorough discussion of non-epileptic or psychogenic spells is considered, including the available evidence for treatment options, which is again quite limited. However, the authors do provide specific recommendations for management, including a template for how to discuss the diagnosis and withdraw antiepileptic drugs.

This work will serve well on the desk of epileptologists and general neurologists, as well as that of other members of the healthcare team who care for patients with epilepsy. Future editions might consider expansion of the book as it is rather brief, which again speaks to the relative paucity of high-level evidence. Nonetheless, each chapter is dense with useful recommendations based on available data, and will improve the quality of care for patients with epilepsy using a comprehensive approach.

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REFERENCES

1. Straus SE, McAlister FA. Evidence-based medicine: a commentary on common criticisms. *CMAJ*. 2000 Oct 3;163(7):837-41.