

Epilepsy Considerations for the General Pediatrician: Epilepsy Awareness Month

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“My fingers feel tingly,” she said. “Is it coming again? My chest feels tight, I don’t know what’s happening in my head. I’d feel better in the hospital.” She cried to her mother. “I know if something were to happen, they could act, they could monitor.” “I don’t want to dismiss her.” Mrs. L worried. “But we can’t keep returning. The Emergency room is hurried. In there, we feel flurried. I know beneath this new diagnosis is buried all her fears and stressors. She’s just a teen. Her seizure frightens, Her hand moves like a horror scene.	I know we’ve been paging, But there’s a lack Of therapists to help us, We don’t know what’s an aura or a panic attack.” I listen, and nod. I feel their family’s tension. It’s coming through the phone: The confusion, the apprehension. I can’t tell her It won’t happen again. All I can do Is put down my pen And listen; And adjust the meds; And give her lists of therapists; And see her again; And hope that through it all, The fear dissipates And knowledge and power remain.
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With a prevalence of nearly half a million children in the US, epilepsy is one of the most common neurologic conditions in childhood (CDC, 2019). Aside from the often-difficult management of seizures and the medication side-effects, epilepsy carries with it the increased complexities of higher rates of psychiatric comorbidities. One review found that there is almost a 5-time higher incidence of psychiatric comorbidities in pediatric patients with epilepsy, compared to other children and youth (Dagar & Falcon, 2020). These comorbidities include anxiety, depression, and ADHD, in addition to neurodevelopmental disorders which in certain cases might be linked to the underlying cause of the epilepsy (Dagar & Falcon, 2020).

With these increased prevalence rates in mind, there are several considerations which are important for the full healthcare team to be aware of when caring for a child or youth with epilepsy. The HEADS examination which every pediatrician incorporates into their practice is vital in teasing apart both risks for increased seizure frequency, and comorbid symptomatology. Multiple of the components assessed, including sleep habits, use of alcohol, and use of drugs, may impact the seizure threshold (Sheth & Gidal, 2006). On the converse, the higher prevalence rates of depression and anxiety among teens/youth with epilepsy emphasizes the importance of assessing depressive symptoms and suicidality among these patients.

When it comes to probing school and activities with teens, epilepsy also confers additional risks. When a patient is at risk for seizures and has had at least one in the previous 3 or 6 months, they must not be put in a position that might harm themselves or others if a seizure were to recur – including driving, or swimming without close supervision (Epilepsy Foundation, 2020). Finally, the increased comorbidity of ADHD and epilepsy is important to consider in providing school support and setting each child up for success. There remains a misperception that ADHD treatment might lower seizure threshold for these patients; recent evidence discounts this theory. Thus, for the best interest of the child and their adjustment in school, ADHD should be treated appropriately despite an epilepsy diagnosis (Auvin et al, 2018; Dagar & Falcon, 2020).

I would be remiss to not mention the comorbidity which occupies a large space of fear and anxiety among many parents of children with epilepsy: the rare risk of Sudden Unexpected Death in Epilepsy (SUDEP). Despite the continued ambiguity surrounding SUDEP, it is important for all members of the care team to be aware of risks which are modifiable, that might increase the chance of SUDEP: increased frequency of seizure (particularly if convulsive or nocturnal), prone sleeping position, and comorbid use of alcohol. Evidence is still conflicting with regards to the association of low adherence to anti-seizure medications and psychiatric comorbidities with rates of SUDEP. There is little good quality evidence to suggest any specific interventions to prevent SUDEP, apart from adequate management of seizures (Watkins et al, 2018). This emphasizes the importance of close follow-up and open relationship with the care team.

With all these considerations in mind, the key to supporting our children and teens with epilepsy is both knowledge, and psychosocial support. The Epilepsy Foundation provides a list of books recommended for family members and patients of different ages, around the experience of having epilepsy – including some that can be downloaded and printed straight from the website. To highlight two book recommendations, *Sometimes I Get the Wiggles* by Andee Cooper is an appropriate read for school-aged children (recommended ages 6-8); and *A Mind Unraveled* by journalist Kurt Eichenwald is one of my attendings' recommendations for teenage patients.

With knowledge, psychosocial support, and an involved care team, we can continue to listen and help our patients and families through this confusing and difficult diagnosis.

References:

1. CDC. (2019). Epilepsy: data and statistics. In: <http://www.cdc.gov/epilepsy/>. <https://www.cdc.gov/mmwr/volumes/66/wr/mm6631a1.htm>.
2. Dagar, A., Falcone, T. (2020). Psychiatric Comorbidities in Pediatric Epilepsy. *Curr Psychiatry Rep*, 22, 77. <https://doi.org/10.1007/s11920-020-01195-8>
3. Epilepsy Foundation. (2020). "California: Driver Information by State." In: <https://www.epilepsy.com/lifestyle/driving-and-transportation/laws/california#:~:text=The%20state%20Department%20of%20Motor.and%20ability%20to%20drive%3B%203>
4. Epilepsy Foundation (2023). "Books for Children." In: <https://epilepsyfoundation.org.au/managing-epilepsy/children-and-epilepsy/books-for-children/>
5. Sheth, R. D., & Gidal, B. E. (2006). Topical Review: Optimizing Epilepsy Management in Teenagers. *Journal of child neurology*, 21(4), 273-279.
6. Watkins, L., Shankar, R., & Sander, JW. (2018). Identifying and mitigating Sudden Unexpected Death in Epilepsy (SUDEP) risk factors, *Expert Review of Neurotherapeutics*, 18:4, 265-274, DOI: [10.1080/14737175.2018.1439738](https://doi.org/10.1080/14737175.2018.1439738)