



THE **Matty Fund**<sup>®</sup>  
Epilepsy Resource Center  
*For children and families*  
www.MattyFund.org



Camp Matty is a very special program that we are proud to sponsor to keep our commitment to families and children affected by epilepsy. This year's therapeutic horse riding day camp was filled with happy faces of children of all ages who participated in a variety of activities and games throughout the four days at Ramrod Farm with Angels on Horseback. Daily riding is always the standout favorite each year, but everyone—including parents and Matty Fund staff, especially enjoyed painting, yes, painting the horses! With perfect weather, a truly outstanding group of volunteers, an awesome bunch of moms, dads and kids—Camp Matty was a summer smash hit!

**Kathy Anzeveno, Executive Director**

*Many thanks to Kyle Franco, a PharmD student who put together the below information for a parent who contacted the Matty Fund with questions about weaning her child off her epilepsy meds...*

### ***Discontinuation of Anticonvulsants***

The decision to discontinue a child's anticonvulsant medications should be made with much consideration, and with the collaboration of their family and health care providers. Generally the drug with the most side effects is the first medication to be discontinued.<sup>1</sup> This should be done through a gradual tapering process and can take anywhere from three to six months.<sup>1</sup> The greatest concern for pediatric patients discontinuing their medications is a relapse or recurrence of their seizures.

A patient is most likely to have a seizure when taken off their medication if they have previously had multiple types of seizures, if they have previously needed multiple medications to control their epilepsy, or if they have ever had a febrile seizure, which is a seizure that is induced by a fever.<sup>2</sup> A patient is less likely to have a seizure when taken off their medication if they have been seizure free for at least two years, if the onset of their epilepsy occurred at a young age, and if they have no family history of seizures.<sup>2</sup>

In a study following 168 pediatric patients taken off of their anticonvulsant medications the overall relapse rate after 10 years was 28.6%.<sup>2</sup> All of these patients were seizure free for at least two years prior to withdrawal, and their doses were decreased by 25% every three months.<sup>2</sup> There were 63 pediatric patients that had previously taken multiple medications to control their epilepsy. Twenty patients had previously had multiple types of seizures, 80 had generalized seizures, and 68 had partial seizures.<sup>2</sup>

Most patients on a ketogenic diet continue to take their anticonvulsant medications.<sup>3</sup> If a patient does particularly well on this diet, discontinuing their medications can be considered. It is estimated that one third of patients on the ketogenic diet become seizure free.<sup>3</sup> The ketogenic diet is generally followed very strictly for about two years and then normal foods can be slowly incorporated back into the patient's diet. At this time medications may or may not have to be restarted, or the diet may have to be reinitiated if a seizure recurs.<sup>3</sup>

The advantages of discontinuing therapy include the elimination of any drug side effects the patient may have previously experienced, and the ability to lead a more conventional lifestyle. One benefit to withdrawing a child's medication at a young age is that the taper is more likely to be successful in younger patients.<sup>2</sup> Also, in older patients there are more potential consequences to having a seizure, such as the loss of a driver's license. All of these factors should be taken into consideration when discontinuing a patient's anticonvulsant therapy.

#### **References**

1. Rogers SJ, Cavazos JE. Chapter 65. Epilepsy. In: Talbert RL, DiPiro JT, Matzke GR, Posey LM, Wells BG, Yee GC, eds. *Pharmacotherapy: A Pathophysiologic Approach*. 8th ed. New York: McGraw-Hill; 2011. <http://0-www.accesspharmacy.com.helin.uri.edu/content.aspx?alD=7985219>. Accessed June 23, 2012.
2. Verrotti A, et al., Antiepileptic drug withdrawal in childhood epilepsy: What are the risk factors associated with seizure relapse?, *European Journal of Paediatric Neurology* (2012), doi:10.1016/j.ejpn.2012.02.002
3. Epilepsy Foundation. Ketogenic diet. URL: <http://www.epilepsyfoundation.org/aboutepilepsy/treatment/ketogenicdiet/index.cfm> [accessed 2012 Jun 24]

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