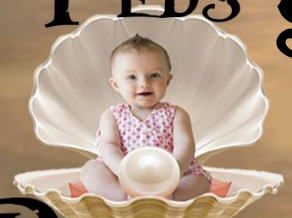
Peds Pearls



Seriously Shaking and Stopping Seizures

Beyond IM, IV, & IO

Scott DeBoer RN, MSN, CPEN, CEN, CFRN, CCRN, EMT-P
Founder of Pedi-Ed-Trics Emergency Medical Solutions, LLC



For many of us in EMS, few things inspire true terror like little ones that are seriously shaking and seizing. We, along with the parents/guardians/caregivers, desperately want the seizures to stop, but how? What can we do to make those troublesome seizures stop? What those kids need is what those of a certain age would refer to as a "chill pill." (Every pun intended.) Technically, the medication class we most commonly reach for is the benzodiazepines (benzos). Obviously though, pill form won't do. Seizing kids and pills just aren't a good mix, especially considering the need for a rapid onset of action and airway protection. Fortunately, the benzodiazepines can be administered via other routes. For example, Versed (midazolam) or Ativan (lorazepam) are among the more common choices and are commonly administered IM or IV. IV administrations are generally more effective and controlled, but starting an IV on a little kid is tough enough, and starting an IV on a tiny moving target is even tougher. Further, starting an IV on an obese moving target can be next to impossible. There's got to be a better way, or, in this case, better ways…

Rectal:

For years, parents have been giving Diastat (rectal diazepam [Valium]) in the home setting and it works really well. When used to control frequently experienced seizures, it is relatively safe and simple. Now, take that one step further. If you can give rectal Valium, can you give rectal Versed (midazolam)? Absolutely. If you can give rectal Valium and rectal Versed, can you give rectal Ativan (lorazepam)? Absolutely. It's the same stuff as the IV version (just dosed differently). Administration is fairly straightforward, in a backward sort of way. You just draw up the dose into a TB (1 mL) syringe, and please remember to take the needle off! And then, with a little K-Y, insert and squeeze. But, as you can imagine, patients (and parents/nurses/medics) are not real gung ho about shoving drugs up someone's rear end. So, once again, there's got to be a better way.

Nasal:

Paramedics have been spraying Narcan (naloxone) up the noses of opiod overdose patients for years. It's quick, simple, and relatively safe, especially for the medics. After all, anything that we can do to avoid accidental needle sticks is advisable, especially when working with an overdose patient (NOT the needle we want to get stuck with!) So, enter an alternative delivery technique. Initially used only with adults, but now commonly utilized in children, the nasal route is great for giving our usual "stop seizing" meds. Spraying Versed (midazolam) or Ativan (lorazepam) up the nose is so much easier than trying to start an IV on an actively seizing kid.



(www.teleflex.com)

Start the IV?

And once the child stops seizing, you can re-evaluate the situation. Specifically, now that the patient's uncontrolled shaking has stopped (and hopefully yours, too), do you really need to start the IV? If so, you can be thankful that you no longer have an actively seizing child with whom to work. Long term seizure control medications like phenobarbital, Dilantin (phenytoin), Cerebyx (fosphenytoin), or Keppra (levetiracetam) will require an IV or IO unless your patient is now awake enough to take oral meds.

So, when a little one is actively shaking and seizing, consider avoiding the needles and stick that medication someplace else. Rectal administration can save your butt, or if appropriate, pick the nasal route!

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Contact us to have Scott DeBoer or one of our other pediatric experts present at your next conference.

Info@PediEd.com ~ 1-888-280-PEDS (7337) ~ PediEd.com

