

Could your child be suffering from seizures?

Welcome to SBH Bronx Health Talk, produced by SBH Health System and broadcast from the beautiful studios at St. Barnabas Hospital in the Bronx. I'm Steven Clark.

A seizure occurs when the brain functions abnormally. This can result in a change in movement, attention, or level of awareness. When it involves children, seizures can occur for any one of a number of different reasons.

With us today to discuss childhood seizures is Dr. Dina Kornblau, a pediatric neurologist at SBH Health System. Welcome, Dr. Kornblau.

I guess our perception of a seizure is when someone's legs are kicking or they're unconscious or they fall to the ground. But that is not necessarily the case, right?

*Correct. There are two main types of seizures. There is one of those big ones that we call convulsions, where you fall to the ground, you get stiff and shake. They're very dramatic and they're very scary to see, but you can also have very little mini ones, where it's suddenly stopping, you're staring off and not moving or not responding for a few seconds. This is not very dramatic and often missed for long periods of time as somebody daydreaming or just you know not paying attention and can be easily missed.*

You told me a story awhile back about a young patient that you had who would be watching TV or doing homework and then he would seem to be daydreaming and I think you mentioned that both his teacher and his pediatrician thought he might have ADHD where he would just go into his own world, but you found that wasn't the case and I guess that's not unusual, right?

*The vast majority of the time when a kid seems to be daydreaming, they really are just daydreaming, they're just thinking about things, but the key question is can you get him out of it? If you go right in front of him or clap in his face or snap your fingers in front of him how does he respond? If you can't get him to respond at all for several seconds when you put something between him and the TV and you can't snap him out of it, if not perhaps it's not an attentional problem or a behavioral problem but he may be having these little mini seizures called absence seizures that are easily treatable and if missed can lead to decreased school ability, diagnosis of attention problems and other things like that.*

How do you diagnose something like that? Let's say a parent brings their child in because they're convinced there's more than just an attention deficit here. Do you do an EEG or what do you do exactly?

*First of all a full evaluation. I can do a quick test in the office called hyperventilation, having the patient kind of heavily breathe for a few moments and if that's what's going on that will often trigger it, but the real test is an EEG, an electroencephalogram, and what that is where we basically put these little wires all over your scalp and it measures the electrical activity of the*

*brain and it just measures the electric activity of the brain while you're sitting there, while you have your eyes closed, while I open they'll turn out the lights and try to have you fall asleep so in different states of the brain and then they do things to kind of try to provoke seizures. One of them is the biggest one is the hyperventilation having you breathe heavily and watching how your brain responds to that. They'll also do something called photic stimulation basically with you the child has their eyes closed, they have like a strobe light like a disco eye just producing lots and lots of flashes of lights and seeing how your brain responds to that. Some people who have epilepsy are very prone, very susceptible to flashes of light triggering their seizures so that's another thing to look at.*

But these are relatively quick and obviously painless procedures, right?

*It's a simple thing. It's not like for example an MRI taking pictures of the brain where the child has stay completely still for 20 minutes inside the machine. For that, most children under 10 will need to be sedated. For an EEG a child does not need to be sedated. They can be awake. They can be moving as long as they're not just you know having a tantrum but it doesn't hurt, it's not a scary test. If there's a concern, a real concern for seizure, it's very helpful. I would say though that if there isn't a concern clinically for seizures if there's nothing going on that seems like a seizure, it's not a test that should be done because you can get EEGs that can really muddle the water. There are times where they've done studies where people who have never had seizures in their life they didn't studies where they do EEGs on them and some of them have EEGs that look as if they should be having seizures but never had and the other way if people who have definite repeated seizures which is called epilepsy who in between the seizures the EEG can be normal so it's a very helpful test but it's not a perfect test. It needs to be done in the context of seeing a physician and then looking at the whole picture.*

To kids, if they're going have seizures, do they get it by a certain age?

*Typically, it depends so on the type of seizure so you can have a seizure anywhere from zero days to 100 and something your brain anybody can have a seizure. Sometimes the most common things that contribute seizures is if you get hit on the head, a young child has a high fever, those are things that commonly trigger seizures, but that's not epilepsy. Epilepsy is someone who's having recurrent seizures without anything triggering it, without low glucose or without you know a fever, there's nothing there that seems to be triggering it. That's what epilepsy is and that can occur at any age.*

Does it tend to be familial?

*Some types of epilepsy are familial and many of them are not.*

What are the common types of epilepsy?

*It can be secondary to an underlying disorder of the brain so for any child who starts having seizures if there's a concern, we need to be make sure that there's no abnormalities, malformations of the brain or tumors of the brain that we need to be concerned about. Most of the time, very often, the MRI pictures what the brain looks like. It's absolutely normal and I'll have parents saying to me "well then what caused it?" Well you don't want to find anything abnormal you want it to be normal. You want to be a child who has normal pictures of the brain, normal electroencephalograms, normal development and those are the children who have a much better chance of outgrowing these. Many, many children outgrow these so there's different types of epilepsies and those epilepsies were defined by how old the child is when they start having the seizures and what type of seizures they have and what that electroencephalogram looks like and if you take those factors that helps the physician figure out which kind of epilepsy it is and therefore which medications to use or not use and will this child be likely to outgrow this or more likely to need to continue to be on this.*

I know it's hard to put a percentage on it but do most kids tend to outgrow epilepsy?

*It depends on the type of epilepsy. So, for example, a disorder known as childhood absence epilepsy that's an epilepsy where they have those kind of brief staring spells that we talked about. Almost everyone outgrows that by 16 years of age*

And the more serious bouts of epilepsy there are more advanced treatments today than there used to be right?

*Absolutely so you know most patients can be treated with medications and we have a lot of different medications now, much more than we used to have in the past. If those don't work, there are other things that can be done such as electrical nerve stimulation to the brain even and there's even surgeries that can be done but those are obviously not the first thing that you try. There's also special diets, but by diets this is nothing like just a simple diet that one might consider, like Weight Watchers, but that's a very severe restrictive diet with concerns for growth and cholesterol and other problems on such a restrictive diet so it's not something that we take lightly to say. I just put this child on a special diet rather than giving medication because the diets that work are very restrictive.*

Okay, so it's very customized to the case?

*Absolutely.*

And I guess, like you said, seizures come in all shapes and sizes and sort of treatments depending on type of epileptic seizure. Let's switch course a little bit and talk about headaches now. That's also an area that you see a lot of and I remember you telling me this at the beginning you just

determine whether it's the type of headache that may be due to something else or whether the headache is the primary cause, right?

*Right so that it's my job my, first and foremost job, to make sure this is not a dangerous headache, what we call a secondary headache secondary to something else going on. When parents come in they're always worried about the headaches, they are always concerned that there's a tumor or something terrible. That's almost never the case, but that is my job to figure out what and need to do further testing. In what we call primary headaches would, the most common are migraines, the pain is the most concern. Migraines tend to run in families so very often or someone in the family who has it. They are severe pounding headaches, you're getting nauseous with them, light bothers you, noise bothers you. You want to stay very still when you have them and it can be very disruptive.*

How young do you get migraines?

*Very young. I'd say any child under five, I'd be a little more concerned that I'd say "are we missing something else going on" but five is. It's more common to start as an early teenager, but as early as five. I have migraines, two of my five children have migraines and they started at five years old.*

Are those related to stress or made worse by stress or lack of sleep or diet or things like that?

*So, most people with migraines have certain things that trigger off their migraines and so one of the longest things I spend time with is going over with the child and the family over things that can calmly trigger. So stress is a common one. That's a harder one to deal with because it's, you know, stress of school well it's hard to just say, "Well, just don't be stressed anymore." But sometimes like that whether or not therapy or counseling or evaluations in school. Certain foods commonly trigger headaches. Things such as hot dogs, things that have nitrates in them. People who drink too much of caffeine, like in caffeinated sodas and that overtime can trigger headaches as well as cheese was a common trigger of headaches. Lack of sleep is another common trigger of headaches. Skipping meals and not drinking enough fluid are the most common ones. Every child I see I give a headache diary to. I go over all the different possible triggers. Show them ways to kind of keep track of what they think may or may not be triggering the headache so that they can take control of them and hopefully have fewer headaches.*

So you actually recommend that these kids keep a diary?

*Absolutely*

*And so they can go back and say, you know, "On Tuesday, when I had a hot dog or I had a test to*

*study for I was unprepared for that triggered a headache.*

*Absolutely*

You made an interesting point last time we spoke about how high achievers are more prone?

*I think that they put a certain stress on themselves and so in that case it's you know one a stress that's a good stress right you want people to care about school and to be a high achiever, but it absolutely is related to the headaches. Apparently over 70% of neurologists get migraines and why that is quite so is it not but what certainly doctors have a high percentage, high achievers overall.*

Are there certain do's and don'ts when it comes to migraines that you should or shouldn't do as far as whether it's medication or as far as how do you respond to them so

*In terms of lifestyle stuff make sure you're sleeping well and long enough. Make sure you're not skipping meals. Make sure you're drinking enough fluids. Making sure you're not being under more stress than you need to be. Making sure you're exercising and keeping yourself fit. The other thing is sometimes if you're taking too much medication for migraines like Tylenol or Motrin those over time can give you what's called medication overuse syndrome and actually worsen the headaches over time and actually caffeine is an excellent medication for migraines. It's in one of the medications that we use commonly, Excedrine Migraine. Many people get medication overuse syndrome from caffeine. I have children, you know most of the kids are not drinking coffee but large amounts of caffeinated soda, two liters of Pepsi a day. Anyone who's drinking more daily caffeine is at risk for medication overuse syndrome and one of the first, easiest treatments is to get that out of your system whether it's caffeine or Tylenol or whatever it is to try cut back on that.*

But I guess the treatment really is if you keep that diary or you know what triggers it I guess over time you get a sense of how do you reduce the migraine or at least the intensity of it right?

*But so ideally right so ideal would be figure out what your triggers are and your and you completely cure your migraines that often actually that can happen to younger children and teenagers is often like a stress component involved and a hormonal component and so it's a little bit harder to kind of get rid of all of them so the first goal is get fewer headaches by figuring out your triggers. The next goal is finding a medication that works for you and there's several different choices and making sure that you're not needing to take it too frequently to cause worse problems. For children who continue to have frequent headaches, by that I mean more than once or twice a week then they are at risk for medication overuse syndrome and then it is better for them to be on we call preventive medication, a medication that you take every day to try to prevent the headaches from coming rather than taking a migraine medication each time*

*you have the headache because that will run you into trouble with medication overuse in the long run. So for those patients who have done their homework and they're looking for triggers and they do trying to find medications that work for but some of them just need a daily preventive medication to try to calm everything down.*

Do you recommend certain supplements?

*Yes. Until recently there was not a lot of different supplements that were talked about as being helpful for migraines and none of them were really proven to be helpful. One of which there have been some small studies would be high doses of riboflavin, which is a B vitamin, as well as high doses of magnesium. So I've been taking too lately tried to see if that works for some patients first before we try other medications. But they're not well proven, but with things that are not well proven the question becomes are they potentially dangerous? High dose vitamin B probably is not are they very extensive because insurance will not cover vitamins and supplements and if you know if it's been disproved you don't want to go there but if it hasn't been disproven that it might be sourced something to try before we try other things with side effects.*

What about other integrative health things like meditation?

*Absolutely. Cognitive behavioral treatments therapy. Those are all absolutely have their rules. It's often hard to get a teenager to which is most my patients or teenagers to meditate successfully but absolutely thinks anything with stress reduction is great.*

OK, Dr. Dina Kornblau, I really appreciate your time here today. Let me give a phone number in case you want more information on pediatric neurology. 718-960-3730. Again, for any services, pediatrics or otherwise, at SBH Health System visit [www.sbhny.org](http://www.sbhny.org) and thank you for joining us. Until next time.