Pediatric Enuresis

Enuresis or bedwetting is a common childhood problem, affecting 5 to 7 million children in the United States each year. By age 7, about 5-10 percent of all children are still wet at night. While 15 percent of kids will outgrow bedwetting without intervention every year, waiting and watching to see what happens could delay children getting dry at night. Listen as Judith VanSickle, MD, Pediatric Nephrologist, discusses causes, diagnosis and treatment of enuresis.

Featured Speaker:

Judith Sebestyen VanSickle, MD

Judith Sebestyen VanSickle, MD, is a pediatric nephrologist at Children's Mercy Kansas City and Assistant Professor of Pediatrics at the University of Missouri-Kansas City School of Medicine. Dr. VanSickle received her medical degree from Albert Szent-Gyorgyi Medical University in Szeged, Hungary. She completed a residency in Pediatrics and Fellowship in Nephrology at the University of Semmelweis, Budapest, Hungary. She then completed a pediatric residency and pediatric nephrology fellowship at Children's Mercy Kansas City. She has specialty interests in acute kidney disease, apheresis, bone and mineral disorders and end stage renal disease.

Learn more about Judith Sebestyen VanSickle, MD (https://www.childrensmercy.org/Profiles/judith-sebestyen-vansickle/)

Transcription:

Dr. Michael Smith (Host): Our topic today is pediatric enuresis. My guest is Dr. Judith VanSickle. Dr. VanSickle is a pediatric nephrologist and an assistant professor of pediatrics. Dr. VanSickle, welcome to the show.

Judith Sebestyen VanSickle, MD, MHPE, FAAP, FASN (Host): Good morning. Thank you for having me. Before we start, I wanted to really say that I'm very honored to talk about the [inaudible] and a very frequent primary pediatric problem because it could be such an important factor for the parents, for the child, and also for the healthcare provider if you are looking for a [inaudible] problem related to something unusual.

Host: I think that, you know, and Dr. VanSickle and I discussed a little bit about where we kind of want to go with this conversation. Let’s start first just a nice definition of what really is enuresis. How common is it? Dr. VanSickle, what’s considered normal and what’s considered not normal?

Dr. VanSickle: Yes, excellent. So many times when we see patients referred to our bedwetting clinic, which again we all see bedwetters. So I'm a primary end stage transplant doctor, but I also see bedwetting. So I do have my own enuresis clinic. Sometimes, we basically see that there’s just a misinformation of normal behavior. So number one, voiding means that we are emptying our bladder during urination. Incontinence or enuresis is kind of like interchangeable. It basically means that the persons involuntarily either discharges the whole bladder or leaks, which means discharge some amount of the urine without really having any control over it.

For that, also, I would like to put as a diagnosis or definition is what's constipation because we have always an argument on that. Really if you look into the medical literature, constipation means that you have an abnormal bowel movement which is different from the usual. Again, usual is the person's usual. So not everybody's gonna daily stools, but it's also not just a frequency but a consistency, the effort with it, and other symptoms. That's how it's constantly leading to encopresis, which is another important definition when we talk about it that a patient also has stool discharge. Either full defecation or partial defecation.

So most of the children by age of three years would become potty trained for both, for bowel and for bladder control. So therefore, you're looking for a 2% of the children at age of four that still would have an enuresis or encopresis. Really, that's the time, after age of four, when you start to focus on that. So before that, I would like to make sure that everybody understands that this is a normal pattern, right? First you have a nocturnal bowel control, then daytime bowel control, then daytime bladder control, and after they're developing the nocturnal bladder control. So by age of five, I would say that .2% of the patients will still have inability to hold the urine. Then as the second step that the primary provider has to figure out, is it primary, "Did you ever have dry days? Even if just one day." If you had no enuresis during the day time or during the night time. That's important. Or you have secondary, "You have achieved dryness and then something happened and now you have daytime or night enuretic problem again."

Host: So when this type of patient then presents and they're in that age group of four to five and the primary care physician really believes that this is a true issue that needs to be worked up, what are the tools available that they can use to evaluate and eventually make that diagnosis of enuresis.

Dr. VanSickle: So I think approaching all of this problem from a physiological and psychological point of view is very important. So don't just [inaudible] that oh this is normal, right? Because there's so many simple tools that you can use in the office that will really rule out 50% [inaudible]. So if you think about it, what makes the urine? That's your kidney. So 50% of the kids could be ruled out by you make too much urine. That could be just because the concentration ability of the kidneys are decreased, and that's many, many disease, renal disorders, dysplastic. Or abnormal concentrations such diabetes could present like that. So just with a simple urine dipstick from the first morning if they could do that, but even if during the day time just confirming how much water the patient had before. Of the gravity is normal, then, again, it's quite unlikely that you would have a patient who has renal dysplasia or have DI or DM, diabetes mellitus, whatsoever.

Then second step, really what I like all of the patients to bring with them, and it's so simple but sometimes people just don't think about it. Have a parent to keep an enuresis diary. That's what they would like—Not just how many times they had bedwetting, but during the day time how many times that child used the restroom. How often they are voiding because, again, that's important for making the diagnosis of voiding dysfunction, which we're going to talk about after. Then secondary, have the diary including for your bowel movements, what's your constipation. So these are, I think, very simple intake information including the history. When was the first time that they achieved bowel control? When was the first time that they achieved bladder control? Have they ever had a dry night? Those kinds of simple questions that they actually do hand out to the patients in a waiting room, then have a urine when they come in just to measure gravity. Then review all of this information will really elucidate

most of the problem. Then we can talk about it who does need a blood work and who needs really a kidney transplant.

Host: Yeah, we can get to that. First, before we go there, how important though—Maybe this is the question I want to ask. If enuresis goes undiagnosed and it becomes a chronic issue, what's the consequences of that? I guess the question also is how important is early detection?

Dr. VanSickle: I would say that for quality of life, extremely important. This data's actually coming from our renal transplant patients follow up quality of life information. So it's pretty reliable, and it's a nationwide data. Those kids will never be able to achieve dryness because of abnormal bladder or some other renal abnormality that could not be fixed with a kidney transplantation, the quality of life is really poor. So from that standpoint, really you would like to make sure that that parent's consent is always addressed properly. Not just saying that, "Oh, it's okay. It's normal. It will go away." Rather every year when you have an intake problem, make sure that you question all of those developmental milestones have been achieved because yes. Many times if you don't diagnose a renal dysplasia on time, the patient's going to have end stage kidney failure that's ongoing, right? That could be primary presenting symptoms of renal dysplasia.

Why do I say it? Because in the last couple of years, probably I have three or four who really presented just primary enuresis. Then secondary, again, many times parents will tell me that they just don't listen to me. So that's also the other thing. It may be normal. It may be psychological. It may behavior. But if it's going untreated, it has a negative effect on the child and on the family too.

Host: Yeah. That brings up, I think, an important point that primary care providers need to be prepared to deal with not just the potential physical issues that are going on, but also the psychological issues. Do you have any advice for primary care physicians that may need some help in dealing with the stress and the psychological issues associated with enuresis?

Dr. VanSickle: Absolutely. So a couple of things, what I would say that the primary provider could do to stay always objective. I think that's what's really important. Every time when you do come in, use those intake forms. That actually they can download from our website or it's freely available from us. With very detailed questions, go through including behavior, attention, including weight problem, including other primary, maybe not related to chronic other illness that could cause bedwetting. Use it, utilize.

Then secondary, always make sure that—Pay attention to secondary bedwetting. Such frequently nowadays we see the children who develop obesity, one of the first symptoms of a victimization of peer pressure we see that the develop secondary enuresis. So you may not really think about it to ask those questions, right? You kind of don't want to sometimes open up that box when you are seeing that patient. But if you have it ready for you, handed out in the waiting room, parents can just go through, say yes or no without really feeling the pressure. Because a child may not, really a teenager, may not really want to talk about it that they have bedwetting because it's something they don't really want to talk about it. The likelihood that they're actually going to say it on the paper is much higher. That's also what studies show with is.

Host: Yeah, very good.

Dr. VanSickle: Then lastly, there's really several new articles that have been recently published in a pediatric nephrology and also the general pediatric journal talking about the psychological and behavioral background of bedwetting, and, again, just reviewing what's normal, what's not abnormal, and when you should refer the child for evaluation.

Host: Well, I want to go there for the last question Dr. VanSickle. When should a primary care physician refer to a specialist like yourself?

Dr. VanSickle: Excellent. So number one, I would say that I would like to make sure that every physician understands that before they would like to go ahead and do treatment, and I know there's a question on that too, evaluate it. Right? Not just give them medication. Not just give a Band-Aid. In that time, if you see the child's first morning urine gravity is abnormally low, that child should have a laboratory evaluation. And sometimes, it's easier to refer to us. We would be happy to do that with those patients. Sometimes there is a question, should it go to endocrinology or nephrology. Don't worry about it. Just refer to us in nephrology. We'll take care about the rest of it and we'll redirect the patient if they need to be seen by endocrinology.

Secondary, if that patient is more than seven years old and still have primary bedwetting—which includes, again, daytime and nighttime problem, not being able to address with all of what we talk about it—that child should be referred to us. Thirdly, if somehow blood work had been obtained and showing that the kidney function is abnormal, that should be a red flag. Then fourthly, if somehow, they see the kidney ultrasound and it's showing that the kidney's abnormal or the bladder's abnormal, that patient also should be referred to us.

Now who should not be really referred to us? There's a couple of cases when I would like to make sure that everybody understands that if a child has primary enuresis but less than four years of age. Even if that would be strictly need to get it down because they need to go into daycare, but otherwise everything else is normal. Gravity is normal. They really still have daytime wetting and nighttime wetting too; those patients are developmentally going through. We could really have the patients are happy to talk to them, but they could really save time just by reviewing the simple parent handout that even the primary provider can provide to them.

Then lastly, those patients who have severe developmental delay. We are talking about patients who are just not able to comprehend that they function. I always said that you can train almost everybody to begin potty trained. Those are the patients that you may, not going to really achieve a huge success from visiting us other than we are going to reassure mom and dad and say, "Everything is normal, but this may not work because of that." I would say that workup everything, make sure that the psychologic behavior and developmental physician is absolutely involved with that case. If all is not helping, let them see us. Because sometimes we do feel that we just didn't achieve as much as they promised to them because I cannot fix certain problems, right? As a nephrologist, we cannot make them to have bladder control if they are not able to have even a bowel control.

Host: Dr. VanSickle, that was an excellent interview. Wonderful information. I want to thank you for the work that you're doing and also thank you for coming on the show today. You're listening to Pediatrics in Practice with Children's Mercy Kansas City. For more information, go to childrensmercy.org. That's childrensmercy.org. I'm Dr. Mike Smith. Thanks for listening.