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World Bedwetting Day

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Discussion between

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Professor Bogaert: It is World Bedwetting day 2017, another day for awareness for bedwetting disease, condition, that is impacting a lot of families, their quality of life. Hi Konstantinos.

Professor Kamperis: Hi Guy.

Q. Is there any good definition for bedwetting?

A. Yes. The current definition for bedwetting is the involuntary loss of urine, or incontinence if you want to call it, beyond the age of five years, that happens during the night time and when the child is asleep.

Q. Okay; why exactly is it happening in some children and why in others not?

A. That is a good question. I think most of the children would wet the bed probably due to the fact that they produce a lot of urine during the night time, whereas others would have problems with their bladder function; they can't accommodate all urine produced during the night time and still, of course, for both types of children and for an enuresis episode to occur, that means the child should be able to wake up when this happens.

The pathophysiology of enuresis is rather complex, but there are many reasons for why children wet the bed.

Q. Do I understand you well that the main or the common problem is actually that children don't wake up at night?

A. That is a prerequisite for the enuresis episode to occur. If the children do have to pass urine during the night and they do wake up, then that is the definition of nocturia; this is most commonly seen in adults. Children generally don't wake up when they have to empty their bladders.

Q. We have read some articles about snoring and children who had their tonsils removed and suddenly they stopped bedwetting. What do you think about that?

A. Yes. It has been shown that both in children and in adults, if you suffer from this condition that is called sleep disordered breathing, that means that, through activation of different hormone systems, you end up producing more urine during the night time, during sleep, and that may, in some cases, be the cause of bedwetting in some children. It has also been shown that, if you treat that condition, there are different ways to treat it by then, in many children, these can alleviate bedwetting symptoms.

Q. Should we ask the parents and the children if they snore when they come for bedwetting?

A. I think that would probably be a good question, especially in those children at least where different treatment strategies haven't been successful – the treatment refractory as we call it, but, in the end, we don't really know how many of the children suffering from bedwetting do have sleep disordered breathing, but generally I think that would probably be a good question, if you have the time to ask about that.

Q. Okay. You know when parents come with their children, there is always a little bit of guilt feeling, so everybody is like in the family looking at each other – is it somebody's fault? Is it the fault of the child, or did the parents do anything wrong?

A. I have to say one thing that it is probably one of the first things that we have to tell the parents and the children is that bedwetting is nobody's fault. It is not the child's fault, it is not the parent's fault. It is just a condition that is treatable, and when this happens, in the families where they do have children with bedwetting, then they have to seek help. This can be treated.

I have heard also many stories in the news as well, that children get punished after a wet night, and recently there have been also children that have been severely injured due to the fact that the parents were very unhappy. It is definitely not the children's fault and parents shouldn't blame the children for that.

Q. The World Bedwetting Day is an important day of bringing out information about bedwetting to the general public.

A. Definitely; it is a good chance for the general public to learn a little bit more about bedwetting, and a good chance as well for all the families that have children that wet the bed to understand that there is help to get, and they should try to get it.

Q. Do you have any idea how long or when parents come to you because of bedwetting? It is like people and parents talk amongst themselves and they say "From what age should they actually come and see a doctor?"

A. Yes. Generally speaking the condition should be treated, or at last diagnosed when the child is five-years old and children that are five-years old and still wet the bed, this is a condition that has to be treated, we feel then at this age families can seek advice with their own general practitioners to start with, but there has been still the notion that it is a condition that you just have to wait and see whether it goes away by itself, and in many children, perhaps, this is true, but definitely not all children. This is also the reason why many of the general practitioners of the families have been reluctant in diagnosing and treating the condition.

I would suggest that families that do have children that wet the bed, that are of five-years or more, then they should seek the advice of their general practitioners.

Q. How common is it when you are five? If you would have a classroom of 25 children in kindergarten, how common is it?

A. For the five-year olds we think that, studies have shown at least that it is approximately somewhere between 15 and 20%, so in a classroom where you have 25 children, perhaps three to five children would wet the bed. Of course, many children will do that every night, whereas others will do it, perhaps two or three times a week. It is common. If we look at the seven-years olds, then it is approximately 10%. If we still look at adolescents or adults, there is still approximately 0.5 to 1% of adults that suffer from bedwetting.

Q. I recall a family and I wanted to reassure the child; he was six-years old, so also to make it I said "How many in your class?" He said "We have 25", so I said – okay, how can I explain to him like 15%? I said "There should be probably two or three other children in your class that are also wetting the bed". The child was looking at me, and he says "Who are they?"

A. If you could provide the names, he would be better.

Q. Okay; it is trying to explain statistics.

A. You are seeing a lot of children that wet the bed and trying to help them, but what would you say to the family that first comes to you? What should they do? What is the first step?

Q. First of all, what I would like to do is to explain the condition, like you say. You just explained "Why do they wet the bed?" That is my first question. My first question to the child is "Why do you think you wet the bed and other children don't?" It is trying to involve the child in your treatment, because most of the time it is the parents that are looking for treatment and they bring the child and they really would like to make the child dry, and I think one of the treatment items is that, if you just tell the parents what the treatment is, it won't work. The child really has to be involved in the treatment, so I explain, and I explain it to the level of the child, that it is probably why they sleep so deeply, or they get very hard to be aroused, and then I explain to them also it has something to do with their bladder, and their bladder getting full, and it is like overflowing. That is the first thing.

That is explaining to the parents, and also, of course, like you said, it is nobody's fault; it is not the child's fault. I think that to be able to help the parents and to guide them what the best treatment option could be for this family is a very good voiding diary.

A. What is a voiding diary?

Q. A voiding diary in the preparation for a treatment, I think, is two days of notification at what time the child is drinking, what he or she is drinking, when he is voiding, if there is any urge, if there is any leakage or wet underwear, and that is during the day for two days. Most of the time I tell them to do this at the weekend, because during school time it is very hard.

In addition to this, let's call it "voiding diary", I think we need a night time diary. What is a night time diary? We have to find out how high the urine production is from this child. That is quite easy to find out, because I ask them for two weeks to weigh the diapers in the morning and to measure the first void. It is very easy to measure. It is one gram in the diaper is one millilitre of urine, so they make the net weight of the diaper plus the first morning urine.

Then I show it to them at the next time I see them in clinic, and I try to explain a little bit, is there some influence of drinking habits, or when do they drink and what do they drink at what time, and I compare it to them, and I say "Okay, listen. This is your average voiding volume, what you can hold during the day, and then look at how much urine you make during the night" and they sort of understand that "Wow – yes, most of the time it is overflowing".

A. I guess you probably experienced that many families won't be able to do such diaries, or fill them out. Is there still something you can tell these families that can help them?

Q. You are picking up such an important point. I don't know exactly the number, but a lot of parents say "Why can't the doctor just fix the bedwetting? Why do we have to make all this notification?" I have to agree that a couple of times parents come back and I say "Okay, where is the voiding diary? Where is the night time weights of the diapers?" "Oh, we left it at home", "Oh, we have forgotten it", but I think it is really quite important to be able to help them for the exact treatment, and just also to try to explain to them why is bedwetting happening. Then, indeed it is, as you say – I agree with you, it is a treatable condition, but it is not very easy to treat.

A. Yes. That we have heard before. What treatment options are there?

Q. I think there are all kinds of treatment options, but it is mainly due to you have to focus on the reasons. If you say "Okay, the arousability; we want to work on the arousability", I think the wetting alarm is an excellent way of doing that. However, this must be a realistic choice of the child and the family, because a wetting alarm, it is going off maybe once, twice or three times during the night, the parents have to be able to wake up as well, help the child to become awake, and so on. It is quite sometimes a frustrating procedure. Parents and children should be aware of that. It is doable; it is has excellent success rates, but it needs a lot of coaching – coaching very closely, I think even preferably week-by-week coaching. That is one aspect.

The other aspect is that we would focus on the urine production and maybe even the night time overactive bladder. I know not all experts agree on that, but I think the main thing is that the child is a little bit adapting his or her drinking habits, and then we should really help to reduce the night time urine production with desmopressin, which is a safe hormone we can give to the children, and that really can significantly reduce the night time urine production.

I personally like to give quite soon also anticholinergic drugs, because I think about one-third of all children who are actually wetting the bed are also suffering somehow from night time, let's say, overactive bladder. You can see this also when you would weigh the diapers, and when you have very different volumes. Also, when you say "Look, it even happens with only 100mLs", so you can really suspect that desmopressin is working well, the child is keeping is drinking habits okay, but my threshold to add anticholinergic is quite low.

A. I really like the idea of trying to figure out the pathophysiology and treat accordingly. Do you use these bladder diaries also on treatment? Do you, for example, a child that you would expect would be dry on desmopressin comes back and tells you "I am not dry; I am wetting the bed every night?"

Q. Absolutely, because it is measuring; I think it is a little bit titrating. The desmopressin medication is titrating, it is looking at what are the drinking habits, what is the effect on desmopressin, and therefore I believe that regularly a voiding diary during the day, but specifically also during the night.

It is sometimes funny, and please allow me this joke again – sometimes people say "My child doesn't drink at all. He takes very well his desmopressin, and then you see the weight of the diapers – 350mL". Then I say "I am sorry, there is no urine productive children". We don't produce urine, we filter and then there is urine coming out. Children that would not drink and then have desmopressin and still have 350, but you are the expert, you are the paediatric nephrologist, what do you think about that, people trying to convince you that their children don't drink?

A. I think you are touching a very important point. Compliance, I think is extremely important and we may sit here and discuss with the family and the children and agree upon anything – if this is not going to happen at home, then there is no help to get, in

a way. Sometimes, when I started treating children with enuresis, I thought how difficult is that? They just have to reduce the amount of fluids before bed time, remember their medication, void regularly during the day time – that is easy stuff, but then I thought if you have to do that, to suggest to a five or a six-year old to do that every single day for months, then I guess that is a difficult task. An important part would be to support these families and especially the children that can see that perhaps this kind of strategy doesn't have an immediate effect, that there is still an investment of their resources and their time and, as you said before, it is extremely important that they understand why should they do that? What can they expect afterwards?

Q. Do I understand you well that you say this is a little bit also quality of life, that, for example, a five or a six-year old just likes to drink, let's say, his chocolate milk bottle before to go to sleep and that you say "You can't have this anymore"?

A. I think you can change some of the habits in the family without influencing their quality of life. I think also that a lot of the people that we see in our clinics don't really know the relationship between drinking and producing urine, for example, and we have to be sure that we inform them about that. Regarding lifestyle generally, avoiding fluids before bed time, discussing good habits regarding sleep hygiene – not having the iPad for a couple of hours before falling asleep, or using the computer, or this kind of habits, I think they, in the end, probably, would improve the family's quality of life instead of reducing it, but I agree, it is difficult sometimes.

Q. If parents come with their children and, okay, the father says, for example "I have wet the bed until I was 10", does it mean anything? Like first of all, is there a hereditary factor for bedwetting as such? Is there also, let's say, a predictive factor that the child will also wet the bed until 10, when they do nothing?

A. We do know that the condition is hereditary. If both parents have been bedwetters there is a risk of up to 70 or 80% that the children are going to be wetting the bed and already, I think, there have been descriptions of large families where the condition is segregating out in some more dominant way already in the 1800s. When we ask the children who come into our clinics, when we ask the parents, very often they would confirm that they had also been bedwetters. The problem is that also with the same family, the phenotype is quite variable, so there could be, in the same family, children with bladder issues, as well as children with large urine production, for example, as the background for their bedwetting. It is very difficult to say or to prognose whether they are going to be dry at all, and at which age?

The fact that the parents have been, perhaps, bedwetters until a specific age doesn't mean that the child is going to be growing out of his problems at that age.

Q. Okay. When parents ask you "Can we do something to prevent that my child will not wet his or her bed so long as I did?"

A. That is a good question. I am not aware of any studies that are looking at prevention, but generally speaking and thinking about what parents could do, for example, I think good habits regarding fluid intake, avoid that during the last hours before bed time, avoid, perhaps, fizzy drinks and good hygiene regarding sleep is one of the things that they can work with.

For children with bladder issues, it could be beneficial to be sure, or ensure that they are emptying their bladder at least four to seven times a day. Sometimes we do meet children that are very reluctant in using the bathroom, what we call "Avoiding postponers"; this I not a good thing, that we know, but it is very difficult to say whether there is any way to prevent the condition in the end.

Q. We have now, in our bedwetting resource centre, two recent studies and publications that breast feeding, or the duration of breast feeding, could have an influence on the resolution rate on bedwetting. Apparently, the longer you are breast feeding, the earlier your child could stop bedwetting; what do you think about that?

A. I really don't know what to say about that. I read the articles with great interest as well, and I am not sure where is a direct causative relationship to bedwetting from breast feeding. I don't know whether this would be a factor, a confounder as we call it, that is related to other factors that could lead to bedwetting for example, whether it would be something related to the social class of the participants to the questionnaire, for example. Before we start advocating longer breast feeding for children, which is generally, of course, a good idea for other reasons, and promise that this would treat their bedwetting, then we definitely need more studies.

Q. I absolutely agree with you. I sometimes think that with statistics you can prove anything.

A. Exactly, yes. If I may ask you, very often we meet families that think that there is a clear psychological background to the children's bedwetting; they are afraid that this is just a sign that they are not thriving, they are not doing well at school, or they just experience something very negative; what would you say about that?

Q. It is a very good point. You all remember that people say "Oh well, the grandmother died" or "There was a new baby"; people sometimes give reasons, but I think a lot of studies have proven that this is not the reason and has nothing to do with bedwetting as such. Even bedwetting can have psychological consequences, and I think that is the reason why we should be very good and thorough in our diagnostic approach to find out maybe there are other factors, but the psychological factors we have found now that this is not the main reason for bedwetting. There may be other cofactors, like attention deficit disorders and others, but they are not really strictly related to that.

We have seen that a lot of psychological problems that children have that will go away when you treat effectively bedwetting, and that is why I think we should really focus in treating bedwetting well and help all those families.

A. Taking into account that in many children bedwetting is a condition that is going to be resolving by itself, why should parents seek help? Are there any consequences for the children?

Q. It is also a good point because when you look at it, people sometimes say "Bedwetting – ah; it is not a big problem – just wear diapers and wait". I remember even a girl that I saw where the general practitioner has told her "You have to wait until you will menstruate and then it will go away", and the girl was 14 and she says "I am menstruating already two years and it is still not there, so I really want a solution now". I really think that it is very important because it is quality of life. The psychosocial and emotional consequences of wetting the bed is really very important. It is like some children get isolated, they don't dare to go to parties, they don't go for overnight stays, they don't dare to go on camps, because it is so associated with wearing diapers, and wearing diapers is associated with being like a baby treated. This is why children and families deserve good treatment, so it is really important to explain and to really coach them, because I think for bedwetting there are solutions, but not very easy solutions, so you really can help them, but the child and the family needs to cooperate, both, for a successful treatment.

A. I agree completely. What do you think of ESPU this year?

Q. ESPU is a very nice meeting, a lot of people, very good sunshine in Barcelona and we are looking forward to your talk tomorrow, and a very nice session on bedwetting research.

[*Ends*]