

Nocturnal Enuresis

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Nocturnal enuresis is usually more recognized as night-time bedwetting. This involuntary urination during sleep is present in the absence of a urological or neurological disorder. In the U.S., between 2-3 million children are afflicted with this disorder. Approximately 10-15% of five year olds and five percent of 10 year olds suffer from bedwetting.

The cause of nocturnal enuresis/bedwetting is considered unknown. There is a hereditary correlation. Bedwetting children are approximately three-to-four times more likely to have parents who had the same childhood problem. Nocturnal enuresis inclines to be self-limiting as the child grows older.

The medical treatment for children is the prescription of imipramine or desmopressin. Desmopressin is used as an intranasal spray and does appear to be effective. The long-term effectiveness of the drug is questioned (12% to 31%) when the spray is discontinued. The side-effects of desmopressin are allergic reaction, seizures, increased blood pressure, hyponatremia and water intoxication.

The use of the alarm system to alter behavior appears to be the most effective (70% improvement of cases) when used with children over the age of seven.

The social ramifications of bedwetting take a greater toll on a child and his or her family than most would suspect. The first is the embarrassment and frustration of the child being unable to fit in with his or her peers. Preparation for bed entails plastic cover mattresses, pull-up diapers and setting of the bed alarms or the use of drugs.

Parent involvement is also great with this disorder, including: setting their own alarms to wake up their child; doctor visits to try and find a solution; and extra loads of wash. If a parent is not properly educated, the child may have the extra burden of being considered lazy and chastised for a disorder he/she has no control over.

The Story of Two Classmates

After two years of persistent conversation "to try chiropractic," the son of one of my husband's best friends brought in her seven-year-old son for a chiropractic evaluation. This young child had been a chronic bedwetter and would void his entire bladder two to three times a week. The mother noted no pattern when the child would wet his bed. The parents had elected to not use drug or alarm therapy, but rather to use pull-ups. The child also had a history of headaches (approximately one a week). There were no outstanding injuries other than the typical falls one might expect from an active child. All medical examinations ruled out urological or neurological causes. This disorder became more urgent to treat as the child became older and "sleepover" invitations were hard to dismiss.

The chiropractic evaluation revealed normal range of motion of the lumbar and cervical spine. The orthopedic and neurological tests appeared negative. Upon static palpation, the presence of

tenderness and edema was located at C5, T6, T12 and S2 (second sacral segment). Motion palpation confirmed decreased -Z translation (posterior to anterior) motion. The sacrum revealed general restriction of motion in relationship to the right SI joint.

The lateral radiographic study revealed posteriority and inferiority at C5 and posteriority at T6 and S2. There was a slight increase of the lumbosacral angle. The line analysis of the AP radiographic study revealed the following listings: C5 PL, T6 PL and posteriority of S2.

This patient was adjusted once a week for the first eight weeks. The technique used was short lever, high amplitude Gonstead adjustment. The segment that was adjusted for the first two weeks was posterior S2. After the first adjustment, the mother recorded that the bedwetting had gone down to one time a week. After the second week, C5 was also adjusted. The patient has been adjusted 14 times in a five-month period. At the time of this article, the child averages wetting the bed two to three times a month.

Due to the activity level of the child, specifically playing soccer, attempting to schedule the child's visits beyond three weeks increases the bedwetting frequency rate. It should be noted that there have been only two recorded headache complaints since the introduction of the cervical adjustment.

Case Number Two

Thirty days after the introduction of this first case, this schoolboy referred his classmate for chiropractic care. This little boy took one of my business cards and gave it to his classmate. Not only were they best friends in second grade, but they also had a common bond: they both knew the embarrassment of bedwetting. They discovered this earlier that summer as they had their first sleepover. The boys told me they became best friends when they realized they both used pull-ups before going to bed to avoid wetting the sheets.

The mother of the second boy shared with me in the consultation, "My son brought home your business card and told me, 'I want to go see this Dr. Claudia, she can fix bedwetting.'"

The history of the second boy was slightly different. He had a history of trauma; in-utero constraint; difficult labor; forceps used during the C-section; numerous falls striking his head as a toddler; and he fell out of a tree at age four.

As an infant, he manifested asthma and allergies. The child uses verolin on a regular basis. Along with bedwetting 3-4 nights a week, the child was beginning to present hyperactive behavior.

The mother stated that the bedwetting seemed to be worse when her son used verolin, was fatigued, or had fluid increase prior to bedtime. Prior medical examination indicated no organic reason for the bedwetting disorder.

The child had been treated the year earlier with the alarm technique for six to eight weeks. This did help out the problem short-term. There was a noted reduction to one week at a time; however, the frequency returned shortly after the alarm had been discontinued. Although the mother expressed satisfaction from the alarm, she believed, "There had to be something else that can be done; this is no life for my son by using an alarm."

The evaluation revealed a decrease in the cervical range of motion with tenderness at the C1-C2 and

C7-T1 region. The lumbar range of motion was normal. Orthopedic and neurological tests were negative. Static and motion palpation confirmed tenderness, edema and restriction at C2, C7, T4 and S2.

The lateral radiographic study revealed an increased lumbosacral curve with posteriority at S2 and T4 and posteriority and inferiority at C2 and C7. The AP radiographic revealed mild left thoracic scoliosis and right compensatory deviation from the center of gravity in the cervical spine. The line drawings derived the following listings: C2 PL, C7 PR, T4 PL, S2 posterior.

The child was adjusted once to twice a week for the first nine weeks. A short lever, high amplitude Gonstead adjustment was used. S2 was adjusted the first three visits. The mother noted that the bedwetting had been reduced to one time a week by the second week. After the first four weeks, C7 and T4 were also being adjusted.

At the time of this article, the child has an average of one bedwetting episode a week; his asthma has improved approximately 40 percent; and the hyperactive behavior has begun to diminish.

The boys occasionally come in together for their chiropractic visits. Between the giggles, they think my adjustments "are cool" since they don't wet their beds as much.

What I enjoy the most when the boys come in for their adjustments is being aware that their quality of life has improved. Only time will tell if their disorder will completely resolve. It is difficult to tell seven-year-old boys not to cause microtrauma to their spinal joints (falls, wrestling and playing hard goes with the territory). Instead, their satisfied parents are happy with their progress and continue to elect to use chiropractic care.

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