Treating Paediatric Bed-wetting with Chinese Medicine

Abstract
Most children achieve night-time dryness by the age of four or five, but it is estimated that 20% of five-year-olds experience nocturnal enuresis (bed-wetting). In addition, 3% of 12-year-olds and 1% of 15+ year olds continue to suffer from bed-wetting. Research shows that only 38% of parents seek medical assistance. Unfortunately, doing nothing is the worst thing a parent can do when dealing with their child’s nocturnal enuresis because the child only has a 15% chance of growing out of their problem by their next birthday. Nocturnal enuresis is one of the problems most frequently addressed by paediatric specialists of TCM today and is often treated successfully. This article introduces the reader to nocturnal enuresis according to both modern and traditional Chinese medicine with reference to a single case history.

One of my fondest memories of childhood is of sleepovers at the house of my best friend. Unfortunately, what I recall as a joyful childhood rite of passage can be a painful and humiliating memory for people who suffered from paediatric nocturnal enuresis. As a specialist in Chinese medical paediatrics, bedwetting or nocturnal enuresis is one of the conditions I see most often. Primary nocturnal enuresis (PNE) is the most common form. PNE is a diagnosis reserved for individuals who have been able to control their bladders during the day (for at least 6-12 months) but have not been continuously dry at night for (at least) a six month period since infancy. Most children achieve nighttime dryness by the age of four or five, but it is estimated that 20% of five-year-olds experience nocturnal enuresis. In addition, 3% of 12-year-olds and 1% of people over 15 years continue to suffer from bed-wetting.

So what treatments do the majority of parents use to solve this problem? None. Research shows that only 38% of parents seek medical assistance for this problem. Unfortunately, doing nothing is the worst thing a parent can do when dealing with their child’s nocturnal enuresis because the child only has a 15% chance of “growing out” of their problem by their next birthday.

Despite numerous studies on primary nocturnal enuresis, the cause of this disease remains elusive to modern medicine (with only 1-3% of cases having an identifiable cause). On the other hand, Chinese medicine [CM] has established what underlies bed-wetting and, over the last two millennia, has developed many effective treatments for this disease. Research demonstrates that Chinese medicine is the best treatment for children who experience enuresis¹. A review of Chinese medical journal articles on nocturnal enuresis (including several comparison studies) reveals that CM has consistently been proven to be more effective than modern medications yet avoids the side effects that are commonly experienced with the modern medical approach. While many diseases are treated most effectively by using one particular modality such as tuina, acupuncture, Chinese herbal medicinals (external or internal) or dietary therapy, in the treatment of nocturnal enuresis all forms of treatment can be effective. In clinic, these various treatments may be used by themselves or in combination. For stubborn cases of enuresis, these treatments can also be used in tandem with modern Western medical approaches, such as alarm therapy.

Chinese medicine’s tried and true secret to success with enuresis is that each and every treatment is tailored to the unique needs of the specific patient and focused on the fundamental cause of the disease. Treatment is geared towards improving the child’s ability to wake up when their bladder is full and to decreasing the child’s need to urinate at night. By treating the root of this embarrassing disease, Chinese medicine can both stop the enuresis and also prevent future diseases that are related to the same disease mechanism. With the right treatment, children and their parents will see improvement in this condition within a matter of days or weeks.

In clinical practice, I use Chinese herbal medicine as my main modality when treating enuresis and sometimes employ tuina or acupuncture (only in an older child) as an adjunct therapy. Below is an example of one child I successfully treated using Chinese herbal medicine. Keep in mind that when I treated...
this patient I was using extract powders that were mixed into boiling water and drunk by the patient (I currently only prescribe raw herbs). These extract powders ranged from 5-to-1 to 10-to-1 in concentration, depending on the ingredient. The dosages given in the case example below are the daily raw herb equivalents. All of my patients with chronic conditions return for their second visit four days after beginning treatment and then come in once a week for 4-6 weeks. If further treatment is needed, the interval between clinical visits is lengthened to every ten days and eventually to every two weeks.

Case example
Last July, Dustin’s mother, Rosa, brought him to see me after reading a newspaper article that discussed how I use CM to treat enuresis. Dustin was a very active nine year old with a slim build (70 lbs). His days were filled with playing sports, especially ice hockey. Dustin had suffered with enuresis from infancy, and at the age of nine was wetting the bed five times per week. His mother described him as a ‘deep sleeper’. Other than his older brother, there was no family history of enuresis. Rosa noticed her son’s nocturnal enuresis was worse when he was over-tired and when he drank too much fluid in the evening. Like many patients with enuresis, Dustin had very few accompanying symptoms. However, he did have a history of recurrent ear infections and had been prescribed antibiotics two to three times per year since his first year of life. Dustin urinated three to four times per day. His urine was light yellow and he usually had a bowel movement every two days. Dustin’s pulse was forceless and his tongue was pale.

Pattern discrimination
Lung-Spleen qi vacuity, Spleen-Kidney yang vacuity and Kidney qi failing to secure and astringe to control urination.

Treatment principles
Fortify the Spleen and boost the qi, supplement the Kidneys, warm yang and secure the essence to control urination.

Formula
Huang Qi (Astragali Radix) 10g
Dang Shen (Codonopitidis Radix) 5g
Tu Si Zi (Cuscutae Semen) 5g
Bu Gu Zhi (Poriae Fructus) 5g
Shan Yao ( Dioscoreae Rhizoma) 5g
Lu Jiao Shuang (Cornu Cervi Gelatinum) 5g
Sang Piao Xiao (Mantis Ootheca) 5g
Wu Wei Zi (Schisandraceae Fructus) 3g
Ji Nei Jin (Gigeraiae galli Endothelium corneum) 10g
Jiu Cai Zi (Allii tuberosi Semen) 3g
Stir-fried Gan Cao (Glycyrrhizae Radix) 3g
Stir-fried Ma Huang (Ephedrae Herba) 3g

In addition to the herbal formula, I suggested that Rosa wake her son once during the night to urinate, avoid giving him fluids after supper and eliminate and reduce the intake of dairy, citrus fruit and its juices, and the 3 C’s (chocolate, carbonated drinks and caffeine). The intake of these items has been shown through research to increase the amount of urine produced, therefore worsening enuresis. During the first six weeks of taking the formula (with minor modifications), Dustin wet his bed on only four occasions. These occasions usually correlated with drinking an excessive amount of fluids after supper and/or being extremely tired (due to too much hockey). After six weeks, Dustin was able to sleep for over nine hours without wetting his bed and no longer needed his mother to wake him up during the night. At this point I began to wean Dustin from treatment, and after one month he was no longer receiving any medicine. During the last month of treatment (with a reduced dosage), he had one reoccurrence due to drinking excessive fluids before going to bed. I reiterated to Dustin and his mother the importance of limiting fluids after supper and discharged him. Follow-up conversations over the next five months showed only a couple of reoccurrences (due to the above lifestyle factors) and both mother and child were very happy with his ability to be consistently dry at night.

Discussion
In Chinese medicine, enuresis is considered a disorder of water fluids, and the three main Chinese medical viscera involved are the Lungs, Spleen and Kidneys. The Lungs are the upper source of water, which will descend and diffuse water fluids through the water passageways of the three burners. It is the descent and free flow of the Lung qi that transports water fluids to the lower burner for excretion by the Kidneys and Bladder. The Spleen governs the movement and transformation of the water fluids. In particular it is the Spleen that sends the clear part of water fluids taken in by the Stomach up to the Lungs for distribution around the body. If the Spleen qi fails to ascend these fluids, they tend to pour downward to the lower burner where they overflow from the Bladder. The Kidneys govern the water fluids of the entire body but especially control the Bladder’s qi transformation and the opening and closing of the urethra. If, for any reason, one or more of these viscera become vacuous and insufficient or their function is inhibited by the presence of pathogenic qi, their control of water fluids may be impaired and enuresis may result. Further, if water fluids collect and transform into dampness, these damp pathogens may seep downwards to become depressed in the lower burner where they inhibit the free flow of the yang qi.

Further, in Chinese medicine, children are considered both physically and physiologically immature. Chao Yuan-fang, in his book Zhu Bing Yuan Hou Lun (Treatise on the Origins & Symptoms of Various Diseases) stated, “The
five viscera and six bowels are made but not complete, ... are complete but not strong.” Similarly, Qian Yi, China’s first great paediatrician, in his Xiao Er Yao Zheng Zhi Jue (A Collection of Essential Paediatric Patterns & Treatments), said, “The skin and hair, muscles and flesh, sinews and bones, brain and marrow, the five viscera and six bowels, the constructive and defensive, and the qi and blood of children as a whole are not hard and secure.” This means that the Lungs, Spleen and Kidneys are all immature and, therefore, intrinsically vacuous and weak. This is why babies and young children tend to present so many signs and symptoms of dampness, phlegm and turbidity, i.e. untransformed water fluids. In particular, the Spleen is not fortified or mature until around six years of age, and the Kidneys do not become exuberant until puberty. In addition, it is said in Chinese medicine that, “The Spleen is the root of phlegm engenderment; the Lungs are [merely] the place where phlegm is stored.” This helps explain why children’s Lungs are so susceptible to the accumulation of phlegm dampness which hinders and obstructs the descent of the Lung qi. It is the inherent immaturity of the Lungs, Spleen and Kidneys that make enuresis a primarily paediatric complaint.

However, anything that damages and causes detriment to these three viscera can also cause formerly mature organs to become vacuous and insufficient. Factors which damage the Lungs include excessive grief and sorrow and the chronic presence of pathogenic qi, including wind pathogens, phlegm and dampness. Signs and symptoms of Lung qi vacuity include spontaneous perspiration, a weak voice, rapid breathing and easy contraction of wind pathogens. Factors that damage the Spleen include foods which engender excessive fluids, such as sweets, dairy products, and excessive oils and fat, uncooked, chilled foods, excessive fatigue, excessive worry and anxiety, excessive use of antibiotics, chronic respiratory and/or digestive diseases and insufficient physical exercise. Signs and symptoms of Spleen qi vacuity include spontaneous perspiration, a weak voice, rapid breathing and easy contraction of wind pathogens. Factors that damage the Spleen include foods which engender excessive fluids, such as sweets, dairy products, and excessive oils and fat, uncooked, chilled foods, excessive fatigue, excessive worry and anxiety, excessive use of antibiotics, chronic respiratory and/or digestive diseases and insufficient physical exercise. Signs and symptoms of Spleen qi vacuity include spontaneous perspiration, a weak voice, rapid breathing and easy contraction of wind pathogens.

In addition, when the yang qi arises to the Heart, it must flow freely to and through the orifices, and infants and children have more phlegm, dampness and turbidity than adults typically do. Thus, the abnormal deep sleep of the paediatric enuresis patient is typically some combination of Spleen-Kidney vacuity and phlegm, dampness and turbidity.

Within Dustin’s formula, Huang Qi, Dang Shen and Gan Cao supplement the Lung, boost the qi and fortify the Spleen. Tu Si Zi and Bu Gu Zhi supplement the Kidneys and invigorate yang, secure the essence and reduce urine. Bu Gu Zhi also warms the Spleen. Shan Yao supplements all three jiao (Lung, Spleen, Kidney) and reduce urine. All products derived from deer velvet and deer antlers have the function to supplement the Liver and Kidneys, supplement Kidney yang and boost essence and blood. I used Lu Jiao Shuang in Dustin’s case because this was the only deer antler product carried by
the extract powder company I was using when treating this patient. This medicinal’s ability to supplement the body is less than the other deer antler products but it is not as cloying and has a stronger restraining and retaining effect. Jiu Cai Zi is not so commonly used but does appear in some doctors formulas to treat enuresis and I included it in this patient’s formula to warm the Kidneys, supplement yang and secure the essence. Sang Piao Xiao, Wu Wei Zi and Ji Nei Jin when used together boost the Kidneys, assist yang, secure the essence and restrain urine. Since Dustin was a deep sleeper I included Ma Huang in his formula. Ma Huang is an empirical herb used by my teacher to help increase a deep-sleeping child’s ability to wake up when their Bladder is full.

I have treated many patients with this condition, with good-to-excellent results in most cases. If you have children in your practice, which I hope you do, I encourage you to consider treating paediatric bed-wetting. You will save children a good deal of embarrassment, make parents’ lives a good deal easier, and allow more children the happy memories of sleepovers with their friends.

References


Clinical Observations and a Comparison Study of the Treatment of Paediatric Enuresis Combining Yi Niao Ding (Settle Enuresis Powder) and Behavioural Therapy by Hu Yi-bao et al., Si Chuan Zhong Yi (Sichuan Journal of Chinese Medicine), 2001, #12, p. 54-55.