The Anatomical Physiology and Clinical Application of the Points Huiyang and Zhonglushu

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Both Huiyang (BL 35) and Zhonglushu (BL 29) are the acupoints of the Bladder Meridian of Foot-Taiyang located in the sacral region. These two points are often used in combination to treat urinary dysfunction, and their regulatory effects are very satisfactory. In this article, the clinical mechanism of Huiyang and Zhonglushu is explained in accordance with the theory of Channels and neurophysiology.

Huiyang and Zhonglushu are located in the region belonging to points of the Bladder Meridian of Foot-Taiyang. The former can be detected at 0.5 cun lateral to the coccyx, where is the crossing spot of the Bladder Meridian and the Du Meridian. It functions to warm yang, promote diuresis, and improve the micturating function of the urinary bladder. The later is on 1.5 cun lateral to the Du Meridian at the level of the third posterior sacral foramen, used for regulating the lower-jiao, strengthening the waist and kidney, and regulating the flow of qi to promote diuresis.

The Neuroanatomical and Physiological Property of the Points

Huiyang and Zhonglushu are located in the sacral region and their stratified anatomy is successively skin—subcutaneous tissue—greatest gluteal muscle. The nerves distributed from shallow to deep in the point areas are the middle clunial nerve, inferior gluteal nerve, pelvic nerve and branches of the pudendal nerve. Among them, the pelvic nerve plexus are distributed in the pelvic organs, such as the urinary bladder, urethra, prostate gland, womb, vagina, and rectum, etc. During excitement or inhibition, they will release corresponding transmitters and induce contraction or relaxation of the smooth muscles of these organs. If there is a disturbance in contraction or relaxation due to diseases of the nerve itself or due to the impact of other factors, the functional disorders of the organs involved may occur. When there is functional disturbance of the nerves that control the smooth muscles of the urethra and urinary bladder, the functional disturbance of the sphincter muscle of the urethra and detrusor urinae may occur, resulting in frequent or urgent micturition, enuresis and dysuria.

The Clinical Application of the Points Huiyang and Zhonglushu

The clinical application of the points Huiyang and Zhonglushu in the treatment of diseases of the urinary system and the other related diseases has the above-mentioned neuroanatomical and physiological basis. In clinic, these two points are often used in combination to treat the following diseases with satisfactory therapeutic effects.

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1. Urethral Syndrome:

A woman, aged 38 years, suffered from urgent and frequent micturition for three years, and paid her first visit on April 18, 1999. She was diagnosed as having urinary tract infection three years before by a hospital in Shanghai. The symptoms were improved after using antibiotics, but the disease was not cured. One week before, such symptoms as urgent and frequent micturition became severer. The urine was discharged once every 0.5 to 1 hour. There was a feeling of residual urine complicated by distension and pain in the lower abdomen, insomnia, poor appetite, lassitude, soreness of the waist, which were worsen before the menstruation. In the examination, the patient was found thin, with no marked tenderness in the abdomen or percussion pain in the lumbar areas, but there was an obvious feeling of distension in the bladder areas on pressure. The pulse was soft and slow, and the tongue fur was thin and whitish. The ultrasonic examination showed that the bladder was of the normal size and the amount of residual urine was over 200 ml. The urine routine examination showed no abnormality. The dynamic examination of urine stream suggested: the maximum uroflow rate was 10ml/s, the maximum content of the urinary bladder was 250ml. The maximum micturition pressure was 74 cm H₂O. The pressure of the urinary bladder in filling phase was 28 cm H₂O. The functional length of the urethra was 5.6 cm. And the residual urine was 240 ml. The patient was diagnosed as having urethral syndrome. The treatment principle was then adopted to warm the kidney to replenish qi, and to promote the functional activity of qi. Zhonglushu, Huiyang, Ciliao (BL 32), Zhongliao (BL 33) and Weizhong (BL 40) were taken as the main points. In needling Huiyang, oblique insertion of about 3 cun alongside the margin of sacral bone was performed. The needling sensations were made to transmit to the lower abdomen and the meatus urinarius. Repeated lifting and thrusting were carried out to strengthen the needling sensation. After the arrival of qi, the manipulation of reinforcement was performed by twirling the needles. For the rest points, the needling depth was about 1.5 cun and the manipulation of reinforcement was performed, with the needles retained for 20-30 min. The treatment was given once every other day and ten treatment sessions were made up of one therapeutic course. After two courses, the patient felt that her urgent and frequent micturition was remarkably improved and other symptoms were relieved greatly. Her urine was discharged once every 3 hours. Her abdominal distention disappeared. The amount of residual urine was 70 ml. The maximum uroflow rate was 17 ml/s. The content of the urinary bladder was 370 ml. The maximum micturition pressure was 54 cm H₂O. The pressure of the bladder in filling phase was 14 cm H₂O and the functional length of the urethra was 4.5 cm. Then, five more treatment sessions were given before all of the symptoms disappeared. A follow-up two months later found no relapse at all.

2. Prostatalgia:

A male patient of 41 years old had urgent and frequent micturition complicated with pain and straining distention for over three months and paid his first visit on August 14, 2001. It was 3 months before that he began to feel frequent and urgent micturition, straining distention in the lower abdomen and straining distention and pain in the perineal area. The pain often became exacerbated at the beginning and the end of micturition, especially after the sexual intercourse. The ultrasonic examination showed that the size and shape of the prostate gland was normal.
The residual amount was about 100 ml. The succus prostaticus was normal. He had been diagnosed as prostatalgia by a hospital in Shanghai. Although certain antibiotics were used, the symptoms continued to exist. In the examination in our department, he was found that, besides the above-mentioned symptoms, he had the urine discharged once every hour. The ultrasonic examination revealed that the residual amount of urine was 120 ml; The size and shape of the prostate gland was normal. Findings from the urine routine and succus prostaticus examination were all normal. Local inflammation was then ruled out. He was then diagnosed as having prostatalgia (the type of stagnation of damp-heat). The treatment was given to remove the damp-heat in the urinary bladder. Point selection: Zhonglushu, Huiyang, Weizhong (BL 40) and Yanglingquan (GB 34). In needling Huiyang, oblique insertion of 3-4 cun was performed with the needle tip pointing to the pubic symphysis, and in needling Zhonglushu, oblique insertion of about 3 cun alongside the margin of sacral bone was performed. The needling sensations were made to transmit to the lower abdomen and the meatus urinarius. Repeated lifting and thrusting were carried out to strengthen the needling sensation. After deqi, the needles were twirled with the reducing method. For the rest points, the needling depth was about 1.5 cun, and the manipulation of reduction was performed after deqi. The needles were then retained for 20 minutes. The treatment was given once every other day. After three treatment sessions, the symptoms of such as urgent and frequent micturition were greatly improved. He had the urine discharged once every 2-3 hours with disappearance of pain. The ultrasonic examination suggested that the amount of the residual urine was 50 ml. After 5 more treatment sessions, all of the rest symptoms disappeared. A follow-up one month later found no relapse.

3. Sciatica

A 45-year-old woman had dragging pain in her right side of buttock and the posterolateral side of the right lower limb for half a month. She paid her first visit on April 4, 2000. The dragging pain was radiated sometimes to the dorsum of the foot and became exacerbated during coughing and sneezing. In the examination, the patient was found with a painful complexion, the Laseque sign (+), the Kernig sign (+). There was tenderness in the popliteal fossa. Diseases of the lumbosacral vertebrae were ruled out by X-ray and CT examinations. The disorder was diagnosed as sciatica. The treatment was given to promote qi circulation and dredge the meridians to stop the pain. Zhonglushu, Huiyang and Weizhong were selected in the acupuncture treatment. For Huiyang, an outward oblique insertion of about 45° was performed to a depth of 3-4 cun. For Zhonglushu, a downward oblique insertion was made to a depth of about 3 cun. In the treatment, the needling sensation was made to transmit to the lower limbs. Repeated lifting and thrusting were given to strengthen the needling sensation. After deqi, the needles were twirled with the reducing method, and then connected onto an electric stimulator (Type G-6805). For Weizhong, the needling depth was about 1.5 cun; after deqi, the needle was twirled with the reducing method, and retained for 20 minutes. The treatment was given once every other day. After 5 treatment sessions, all the symptoms disappeared.

References
   (Translated by Ye Huan 叶环)