Intervertebral Disc Herniation Treated by Comprehensive Therapy

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Clinical Data

1. Diagnostic criteria

In reference to Criteria of Diagnosis and Therapeutic Effects for TCM Diseases and Patterns\(^{[1]}\) by State Administration of Traditional Chinese Medicine.

   a. There is history of traumatic injury, chronic strain or invasion of pathogenic cold and dampness in the lower back. Most patients have chronic lumbar pain before the onset.

   b. It often occurs in the young and middle-aged adults.

   c. Lumbar pain radiates to the buttocks and lower limbs, and would be aggravated with increased abdominal pressure (such as cough, sneezing).

   d. The spinal column inclines laterally and the lumbar physiological curvature disappears, with tenderness next to the pathological region of the vertebra, and radiating to the lower limb, accompanied by motor impairment in the lower back.

   e. Hyperesthesia or dysesthesia appears in the lower limb dominated by the spinal nerves. Muscular atrophy could appear in those with long duration. Leg-raising test or pressure test are positive. Reflex in the knee and heel tendon decreases or disappears, and the extensive strength decreases in the thumb.

   f. CT and MRI examinations show the position and degree of intervertebral disc herniation. X-ray examination shows curvature of the spinal column, disappearance of the anterior lumbar protrusion and possible stenosis of the sick intervertebral disc.

2. General materials

From June of 2001 to June of 2006, we have treated 169 cases, including 96 males and 73 females, with the ages ranging from 16 to 75 years old, with the durations ranging from 3 days to 16 years, at the average of five months, and including 9 cases with herniation in L\(_3-4\), 97 cases in L\(_4-5\), and 63 cases in L\(_5-S_1\).

Therapeutic Methods

1. Acupuncture therapy

Acupoints: Ashi points, Huantiao (GB 30) and Jiaji (Ex B 2), Yaoyangguan (GV 3), Dachangshu (BL 25),
Guanyanshu (BL 26), Zhibian (BL 54), Chengfu (BL 36), Yinmen (BL 37), Weizhong (BL 40), Chengshan (BL 57), Kunlun (BL 60) and Taixi (KI 3)

Operation: After the patient took a prone position, Ashi points were selected 1.5-2 cm lateral to the sick side of the spinous space of the corresponding intervertebral disc herniation. After routine disinfection and arrival of the needling sensation, the needles were manipulated with the lifting, thrusting and twisting technique and retained for 30 min. During retaining the needles, the needles were manipulated for 1-2 times. TDP physiotherapy was added. In Ashi points and Huantiao (GB 30), the needling sensation was requested to radiate to the sick limb.

2. Chinese massage therapy

Rolling technique: The medical practitioner applied the rolling technique on the lumbosacral region of the patient fro and to for about 5 min, and staying on Shenshu (BL 23) and Dachangshu (BL 25) for 1 min respectively, and then on the buttocks all the way down to the lower leg along the distribution region of the sciatic nerve fro and to for about 5 min.

Springing-plucking technique: The medical practitioner plucked the sacrospinal muscle and piriform muscle on the sick side with the elbow tip for 3-5 times, by the intensity within the tolerance of the patients.

Oblique Stretching Technique: After the patient took a lateral recumbent position, with the healthy leg straightened underneath and the sick leg flexed above, the medical practitioner faced to the patient to resist the sick buttock with the elbow of one hand and to hold the sick shoulder with the other hand, to stretch the patient simultaneously with two hands in opposite directions forcefully, once respectively on the left and right side.

3. Fumigation by herbal drugs

Model DXZ-1 Computerized Middle-Frequency Therapeutic Apparatus for Herbal Fumigation was used, by Cortex Eucommiae (杜仲) 30 g, Radix Aconiti (生川乌) 30 g, Cortex Eucommiae (杜仲) 30 g, Radix Lycii (牛膝) 30 g, Radix Lycii (牛膝) 30 g, Rhizoma Curcumae Longae (川芎) 30 g, Flos Carthami (红花) 30 g, Radix Aconiti (生川乌) 30 g, Radix Aconiti Kusnezoffii (附子) 30 g, Fructus Chaenomelis (木瓜) 30 g, Pericarpium Zanthoxyli (川椒) 30 g, and Caulis Spatholobi (鸡血藤) 30 g. The temperature was within the patient's tolerance, usually at 48-55 °C, and the treatment was given for 30 min each time.

The above treatment was given once every day and stopped for 30 days after seven sessions. After seven sessions, the therapeutic effect was observed.

Therapeutic Effects

1. Criteria of therapeutic effects

The therapeutic effects were assessed upon Criteria of Diagnosis and Therapeutic Effects for TCM Diseases and Patterns by State Administration of Traditional Chinese Medicine.

Cure: Pain in the leg disappears and the leg could be raised above 70° and the patient could restore to normal work.

Improvement: Pain in the leg is alleviated, with the lumbar movement improved.

Failure: No change in the symptoms and signs.

2. Therapeutic results

The results showed cure in 129 cases, improvement in 33 cases and failure in 7 cases, and the total effective rate was 95.8%.

Discussion

Lumbar intervertebral disc herniation belongs to the scope of "pain in the lumbar region and leg" and "Bi-obturation syndrome" in traditional Chinese medicine and is mostly caused externally by invasion of pathogenic wind, cold and dampness into the human body, leading to pain due to obstruction in the meridians and poor circulation of qi and blood, and internally by insufficiency of Wei-defensive yang, emptiness in the hairy pores, deficiency in the constitution and excess in the symptoms, and obstruction of the meridians. It is believed in modern medicine that lumbar intervertebral disc herniation is related to protrusion of the pulpiform nucleus to the intervertebral fossa or into the vertebral canal, to stimulate or compress the nerve root, leading to local inflammation and edema, and hence pain and numbness in the lumbar region and leg.

Acupuncture treatment applied on the local region of lumbar spondylopathy by acupoints along the pathways of the meridians can have the effects to activate blood, eliminate blood stasis, dredge the meridians, circulate qi and stop pain. Ashi points are