Irritable bowel syndrome treated by traditional Chinese spinal orthopedic manipulation

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KEY POINTS FROM THIS STUDY:

1) Irritable Bowel Syndrome (IBS) is a functional gastrointestinal (GI) disorder characterized by abdominal pain, altered stool form or stool passage, and bleeding. It occurs in 10-20% of the population. There is no demonstrable organic pathology.

2) These authors evaluated the clinical effect of traditional Chinese spinal orthopedic manipulation (TCSOM) [adjustment group] in treating irritable bowel syndrome (IBS) compared with pinaverium bromide: Dicetel [drug group]. Dicetel is a calcium antagonist used to relieve GI pain, spasm, and transit disturbances; the drug was taken 3X daily for 2 weeks.

3) 210 patients with IBS were randomly divided into the adjustment group and the drug group. All adjustment subjects were adjusted 5 times (3X/wk for 1 week, then 2X/wk for 1 week).

4) Pain intensity was assessed on a visual analogue scale and symptoms were evaluated based on bowel symptom scale (BSS) scores before and after treatment.

5) Post-treatment subjective assessment for the adjustment group showed that:
   • 92 cases had excellent results (88%)
   • 10 cases had good results (10%)
   • 3 cases had fair results (2%)
   • 0 cases had poor results

6) Post-treatment subjective assessment for the drug group showed that:
   • 30 cases had excellent results (28%)
   • 41 cases had good results (40%)
   • 12 cases had fair results (11%)
   • 22 cases had poor results (21%)

7) “Displacement of intervertebral discs and/or vertebra in the thoracic or lumbar region appears to be a contributing factor in the symptoms of IBS. Correcting this displacement of intervertebral discs and/or vertebra to resolve the stimuli caused by pressure exerted on the nerves and vessels around the spine is an effective treatment for IBS.” [Key Point]

8) Many who have IBS also suffer from back pain.
9) The symptoms of IBS result from “dysregulation of the bi-directional communication between the gut’s enteric nervous system and the central nervous system of the brain, referred to as the brain-gut axis.”

10) Skin paresthesia on the abdomen or back can be used as a diagnostic tool to locate the segmental level of involvement.

11) Palpation along the spinous processes can locate vertebrae that are “not in alignment,” and the adjacent soft tissues often display tenderness. Also, “taut soft tissue projections” perpendicular to the spine, are found.

12) These authors found T9-L3 to be the segmental levels of involvement in IBS. The sympathetic innervation of the GI tract is from the lower thoracic and upper lumbar spinal segments.

13) These authors advocate taking x-rays/MRI to determine vertebrae displacement, IVF stenosis, IVD wedging, IVD narrowing, and/or spinous process deviation.

14) The imbalance of Yin and Yang in the spine is “abnormal function of the nervous system.”

15) Traditional Chinese spinal orthopedic manipulation [adjustment group] is based on anatomy, biomechanics, and radiology. It consists of using the thumb or arm of the practitioner to “move or press the patient’s spine into correct position.” The patient is in side-posture, the thrust is directed to the affected spinal segment, and usually an audible clicking is heard.

16) “Our results showed that the clinical effects of [spinal adjusting] was significantly better than that for [drug] treatment. In addition, symptoms in the patients in the [adjustment] group disappeared or significantly improved soon after spinal manipulation.”

17) It is speculated “viscerosomatic or somatovisceral reflexes” ... “could be part of the pathophysiology in IBS.” The aberrant trigger that initiates the reflex could be in the viscera, skin, muscle, tendon, or ligaments.

18) Somatic afferent neurons (proprioception, touch, pain), somatic efferent neurons, visceral afferent neurons, and visceral efferent neurons, are “all enwrapped in one neurilemma and pass through the intervertebral foramen of the spine. If an intervertebral disc is displaced or the intervertebral joints are subluxated, the shape and size of the intervertebral foramen will be changed, thereby increasing the possibility of abnormal pressure and/or stimulation to the above mentioned nerve fibers.” [Key Point] “The nervous system is vulnerable where delicate nerve tissue comes into proximity with the moving bones of the spine.”
19) These spinal nerves can be either be compressed (constipation) or excited (diarrhea).

20) With disc degenerative disease and disc narrowing, the intervertebral foramen becomes smaller, and the foramen nerve and blood vessels become more vulnerable to pressure or irritation.

21) “It is speculated that the cause of IBS is displacement of the vertebrae causing stimulation to the nerves and vessels around the spine.” [Key Point] “Considering this view, the aim of spinal manipulation is to restore the appropriate position of the vertebrae, and decrease stimulation to the nerves and vessels.”

22) The spinal adjustment will also “relieve tension of the muscles around the spine.”

23) “The therapeutic results of [the spinal adjustment] in this study showed that symptoms were reduced, disappeared or were immediately relieved after treatment.”

24) “Correcting the displacement of the vertebra and/or intervertebral disc of the thoracic or lumbar vertebrae by relieving the stimuli caused by the increase in pressure around the nerves and vessels adjacent to the spine is an effective way to treat IBS.”

COMMENTS FROM DAN MURPHY

In this study, the description of “traditional Chinese spinal orthopedic manipulation” is equivalent to a standard chiropractic spinal adjustment. Vertebral displacements were identified through palpation and x-rays. Physiological components of nerve interference were identified through assessment of superficial sensation and location of abnormal soft tissue consistencies. The adjustment was delivered while the patient is in a side-posture position. The adjustment was designed to put the displaced vertebrae back into its correct position in an effort to reduce nerve pressure or nerve irritation. The authors use the term “subluxated” to describe the displaced vertebra. The authors discuss GI visceral dysfunction as a consequence of altered function of the sympathetic nervous system, as a consequence of somatovisceral reflexes, nerve pressure, or nerve irritation. Risks of nerve interference from subluxation are greater in the presence of degenerative disc disease. Spinal adjusting was significantly superior to drug therapy:

**Results In the Treatment Of Irritable Bowel Syndrome Using Standard Measurement Outcomes**

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<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
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<tbody>
<tr>
<td>Spinal Adjusting</td>
<td>88%</td>
<td>10%</td>
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<tr>
<td>Drugs</td>
<td>28%</td>
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