Case Report

Treatment of Irritable Bowel Syndrome Somatic Comorbidities by Osteopathic Approach

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ABSTRACT

Irritable bowel syndrome (IBS) is a chronic continuous or intermittent gastrointestinal tract dysfunction encountered by the health professionals. IBS patients are afflicted with intestinal and extraintestinal somatic morbidities. The aim of the present case study was to explore the effect of osteopathic treatment (OT) on somatic comorbidities in IBS patients. The author reported a 43-year-old female case who presented with a headache, abdominal pain, pain in the one-half of the body, lower back pain, increased the frequency of stool passage in a day, with alternating diarrhea or constipation, bloating; with few occasions of nausea and vomiting. The patient had history of 3-year-old hysterectomy and with no other relevant medical history. On endoscopic, colonoscopy, and blood investigations, no abnormality was detected. In this case, the osteopathic diagnosis was made as visceral somatic dysfunction and the OT made the remarkable difference in the patient symptoms as assessed by bowel symptom scale.

Key words: Bowel symptom scale, irritable bowel syndrome, osteopathy, somatization, visceral osteopathy

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INTRODUCTION

Irritable bowel syndrome (IBS) is a chronic continuous functional gastrointestinal tract (GIT) illness typically characterized as disturbed intestinal motility due to unknown anatomical and pathological reason.[1] The onset of IBS occurs before the age of 50 years[2] and occurs more frequently in women, at a women: Men ratio 2:1–4:1.[3] Patients with IBS often have at least one co-morbid somatic complaint such as depression, anxiety and somatization, greater impairment of quality of life, and more illness related work absenteeism.[4] The disease is diagnosed using the Rome Committee III.[5] The Rome criteria state that abdominal pain (AP) should be continuous or recurrent for duration of at least 3 months. AP should be relieved by defecation or associated by changed frequency of stool. These symptoms should be associated with other symptoms such as bloating and passage of mucus. The pathophysiology of the IBS is still unclear, but it appears due to "brain – gut axis" dysregulation.[6] The central nervous system and sympathetic nervous system (SNS) and parasympathetic nervous system (PNS) control the enteric nervous system (ENS). Disturbances in the SNS, PNS, and ENS have been found in the IBS patients.[7] The signs and symptoms of the functional GIT disorder should be focused on to rule out the red flags for IBS, before make visceral somatic dysfunction as diagnosis for IBS confirmed by tenderness, asymmetry, restriction, and tissue texture changes on manual palpation. There are various treatment approaches (pharmaceuticals, dietary modifications, psychotherapy, and Chinese herbal medicines) used to treat IBS; but still there is a scarcity of the effective treatment approach.

The bowel symptom scale (BSS) was used to monitor the progression of the treatment throughout the study. The validity and test – retest reliability of BSS in IBS patients is proven.[8] It consists of 100 mm visual analog scale for pain/discomfort, constipation, bloating, and diarrhea; overall severity scale; items for rating stool passage; items for rating

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quality of life; recording changes in medication usage and fiber consumption.

CASE REPORT

A 43-year-old female, who works as a housewife, presented with IBS. Her main complaint was AP in the left upper and lower quadrant, increased frequency of the stool passage (7–8 times/day). The pain was described as dull ache stretch type of feeling. She experienced nausea, headache, and bloating intermittently. Constipation and discomfort in the epigastric region were the other disturbing symptoms experienced by her. She had also described the feeling of tiredness throughout the day. The patient had 3-year-old past surgical history of hysterectomy because of fibroid uterus.

She underwent multiple investigations such as endoscopy, colonoscopy, and blood tests, but no abnormality was detected. The patient was diagnosed with IBS by the gastroenterologist. Patient had been treated by proton pump inhibitors, anti-depressants, and nonsteroidal anti-inflammatory drugs for the last 3 years, but had no relief leading to the stressful life. No factors were found to relieve her symptoms.

On presentation, her blood pressure was 130/86 and pulse was 82 beats/min. Physical examination showed a healthy female weighing 85 kg. On osteopathic assessment, through the global listening the motion restriction was found in the left upper and lower abdominal quadrants respectively, upper cervical spine and upper lumbar spine. The tenderness was present in the left iliac fossa and at the sacrum base. Hypertonicity was found at left psoas muscle, thoracic and lumbar erector spinae muscles respectively, sub occipital muscle. The remainder of the assessment was normal and no other abnormality was detected.

The osteopathic treatment (OT) plan was made for 2 sessions per week for 4 weeks. During the first session, the patient underwent osteopathic manipulative approach, consisting of all the major diaphragms' release namely pelvic diaphragm, abdominal diaphragm, thoracic outlet release, and hyoid diaphragm release, respectively [Figure 1]. During the 2nd session, the gastro-esophageal junction release, sigmoid colon release, cranial therapy to the occiput, and sacral release was incorporated. The hypertonic muscles were released and the home exercise regimen (flexibility exercises) was advised to the patient. Patient was also advised to take adequate fiber intake and fluid consumption in her diet.

On the following consultation, it was found that the patient got some relief in the individual symptoms and the overall severity of the IBS had also reduced as measured by BSS [Table I].

Figure 1: Major diaphragms' release. (a) Hyoid bone diaphragm release, (b) thoracic outlet release, (c) abdominal diaphragm release, (d) pelvic diaphragm release.

Table I: The bowel symptom scale score of the patient irritable bowel syndrome severity throughout the study

IBS symptomatology	BSS	
	Pretreatment VAS	Posttreatment VAS
Abdominal pain/discomfort	74	35
Abdominal bloating	45	32
Constipation	05	01
Diarrhea	85	40
Overall severity of IBS symptomatology	61	43
Quality of life	80	55

BSS: Bowel symptom scale, IBS: Irritable bowel syndrome, VAS: Visual analog scale

DISCUSSION

The main purpose of this case report was to explore the effect of OT on somatic comorbidities in IBS patients. The osteopathic philosophy stated that the structure and function within the human body is interrelated. The osteopathy approach provokes the body internal mechanisms to heal itself by the use of human hands.[9] The OT centers on the nervous system, the circulatory system, the spine, the viscera, and the thoracic and pelvic diaphragms. Using osteopathy, the autonomic tone of the intestine was normalized, along with addressing the various somatic dysfunctions associated with it.[10]

The results of the OT on completion showed the marked improvement in the patients overall IBS severity and also on the pain. This may be attributed to the regulation of the sympathetic tone and parasympathetic tone of the intestine by pelvic diaphragm release, psoas release and sigmoid colon release (pelvic splanchnic nerves S2, 3, 4 that innervates the sigmoid colon)[11] and articulation to the upper lumbar spine (sympathetic innervations T4 – L2 via the collateral sympathetic ganglia).[12] The treatment of the cranial base and the sub occipital muscle tightness had released the tension on the vagus nerve (parasympathetic innervations to small intestine, colon, and upper GIT) at the jugular foramen.

The normalization of the autonomic tone by the osteopathic manipulation approach was consistent with the historical understanding of the somato – visceral concept.[13] The OT approach also minimized the nausea and vomiting by inducing cannabimetic effects.[14]

The case study had not addressed the chronic nature of the condition and also the short period of treatment sessions were provided to the patient. This study had explored the osteopathic approach in IBS up to some extent. In the future research, the randomized controlled trials is supposed to be conducted to explore the OT in IBS to the full extent.

CONCLUSION

The osteopathy approach provides help in IBS patients but its efficacy is still not known. In the treatment regimen of IBS, the osteopathy should be incorporated to yield better outcomes to the patient.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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