Osteopathic Manipulative Treatment in Cystic Fibrosis Distal Intestinal Obstructive Syndrome and Chronic Constipation: A Possible Preventative Measure.

INTRODUCTION

Distal intestinal obstructive syndrome (DIOS):
- Obstruction at the ileocecal valve
- Extremely painful and dangerous condition unique to those with CF; plagues approximately 10%–20%.
- Can cause bowel perforation, leading to a myriad of other complications including death
- Conventional treatment protocol for bowel obstruction in the CF patient is lacking in prevention measures
- We are studying the impact of Osteopathic Manipulative Treatment (OMT) upon the prevention and treatment of this disorder

METHODS AND MATERIALS

There have been 8 consented, 6 enrolled and 5 subjects have completed the study thus far.

Inclusion criteria:
- Diagnosis of cystic fibrosis
- Symptoms of bowel disease at least 2 times in the past six months
- Takes at least one medication for bowel symptoms
- Minimum of 40% FEV1
- The subjects are sequentially divided into a cross-over study design grouping
- Each subject underwent four treatments over four months with concurrent weekly surveys (treatment phase) and four months of only surveys (nontreatment phase)
- A weekly validated survey is used to evaluate abdominal symptomatology

An osteopathic structural screening exam is performed including assessment of:
- Spine
- Pelvis
- Sacrum
- Thoracoabdominal diaphragm
- Thoracic Inlet
- Ribs
- Abdomen is assessed by mobility of the:
  - Stomach
  - Hepatic and splenic flexures
  - Cecum and sigmoid colon
- 45 second Chapman screen
- A full abdominal exam is performed

All somatic dysfunction is treated with indirect techniques.

TREATMENT

Treatment is focused on normalizing autonomic tone, improving lymphatic drainage, and releasing intestinal restrictions.

The following areas are treated on every patient:
- OA joint
- Thoracic inlet
- Thoracoabdominal diaphragm
- Lumbosacral junction
- Pelvis
- Ribs
- The abdomen is addressed by freeing restrictions of the attachment points of the colon and a colonic milking technique along with lymphatic drainage of the abdomen is performed
- The segments in the spine and ribs are treated as found

RESULTS

• Patients had an overall decrease in rating the severity of their abdominal pain (Figure 1).
• Consistent Chapman points were found in upper and lower lung, stomach, small intestine, and ascending colon (Table 1).

CONCLUSIONS

• Patients overall had a decrease in pain, increase in satisfaction with bowel movements, and decrease in additional laxative usage while in the treatment phase of the study.
• The consistent upper thoracic group curve along with the upper and lower lung Chapman points could be an indicator of the chronic lung disease that is present in all of these patients.
• The consistent Chapman points at the small intestine and ascending colon could correlate with disease of the ileocecal valve. Interestingly, there were minimal fecal counts reported, possibly indicating that there is a primary role of small intestines in CF chronic constipation.

REFERENCES