

# Evaluation of behavioural and gastrointestinal symptoms in autistic children after visceral osteopathic treatment

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• [Abstract](#)

## Abstract

### Introduction

Autism or Autistic Spectrum Disorder (ASD) is a Pervasive Developmental Disorder (PDD) with abnormal or impaired development in reciprocal social interaction, abnormal or impaired social communication and social imagination. Recent theories focused on the possibility of autism being linked with gastrointestinal (GI) abnormalities. Moreover, the problem behaviour typical of autism might be linked to the underlying medical symptoms such as abdominal pain, diarrhoea, and bloating typical of GI dysfunction.

### Methods

The study utilised VOT on 49 autistic children aged 3–8 yrs to investigate possible effects of the techniques. The children in the study were suffering from gastrointestinal symptoms and presented with impaired social relationship and communication, but were otherwise healthy. VOT was applied to the abdomen (duodenum, ileo-caecal valve, sigmoid and pancreas areas) and gastrointestinal and behavioural changes were measured after 6 osteopathic treatment sessions, once a week for six weeks. Each intervention session was for thirty minutes. The evaluation of the study was accessed via 8 questionnaires given to the parents who were asked to grade the child's response following the VOT intervention e.g. frequency of bowel movement, appetite eye contact and other parameters. Four questionnaires were given to the parents before initiation of the osteopathic treatment and the other four were given during the treatment phase of the research. Ethics approval was granted by The British College of Osteopathic Medicine and by University of Westminster Ethics Committee – London UK.

### Results

Wilcoxon Signed-Rank Test has been used to compare the “pre treatment” data and the “during treatment” data. Statistical analysis indicated improvement in the gastrointestinal symptom of vomiting ( $p = 0.00029$ ) and in the parameter of poor appetite ( $p = 0.039$ ) after application of VOT. The subjects also had a significant improvement in eye contact ( $p = 0.035$ ) one of the most characteristic social behavioural symptoms of autistic patients.

## Conclusions

The experimental hypothesis has been supported indicating a positive effect of VOT on the measured symptoms and behavioural patterns of Autistic children. This data indicates that the use of VOT on GI function may be of benefit to autistic children.

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