Title A pilot study of the effectiveness of reflexology in treating idiopathic constipation in women Journal Complementary Therapies in Clinical Practice xxx(2009) 1-6 Authors Sue Woodward, Christine Norton, K. Louise BarriCball Reference www.elsevier.com/locate/ctnm

Disease / illness Idiopathic constipation Type of study Pilot study Number of clients 19 females Control type Single group test-retest trial

The aim of this pilot study was to determine the effectiveness of reflexology in treating idiopathic constipation in women for the treatment of women with idiopathic constipation defined according to the Rome II criteria.

Idiopathic constipation is a symptom based disorder defined as “unsatisfactory defecation and is characterised by infrequent stools, difficult stool passage or both. Difficult stool passage includes straining, a sense of difficulty in passing stool, incomplete evacuation, hard/lumpy stools, prolonged time to stool or need for manual manoeuvres to pass stool” Constipation can result from either slowed colonic transit and/or difficulties associated with rectal evacuation. Severe cases can have an adverse effect on quality of life and patients may experience anxiety and depression. Increasing dietary fibre is not usually effective for this complaint nor has evidence been provided for a beneficial effect of either increased water intake or exercise. Laxatives are commonly used but lose their effect over time and can have adverse effects such as bloating and abdominal pain. Biofeedback has been found to be effective.

Methods 19 female patients aged between 22 and 75 years, were recruited between March and July 2005 from the physiology department of a tertiary referral centre for the treatment of chronic idiopathic constipation with biofeedback and behavioural management. All had a confirmed diagnosis of idiopathic constipation based on the Rome II criteria. The first 19 consecutive female patients who agreed to participate were recruited. The intervention consisted of 6 reflexology treatments at weekly intervals, each lasting 35-45 minutes. All treatments were carried out at an NHS hospital out-patients clinic. The reflexology treatment was given as defined by a standardised chart produced by the Association of Reflexologists (AOR), and was based on the Ingham method – applying a standardised treatment first to the right foot and then to the left.

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Outcome Measures.

All the following outcome measures were administered before the reflexology treatments and after the 6th treatment.

 The patients ingested gut transit markers swallowed on three consecutive days and a plain abdominal Xray was taken approximately 120 hours after the ingestion of the first set of markers. Excessive retention of any of these three sets (when compared to a previously validated normal range) was regarded as indicative of slow transit.  Patients were assessed using a standard assessment proforma, currently in use in the NHS nurse-led biofeedback service, through which a standard history was gathered.  Patients were asked to keep a bowel diary for one week  Prior to the intervention a general health history was taken from the patient  Out come measures used were the Hospital Anxiety and Depression Scale (HAD) ( to assess any possible psychological impact of the intervention); the Short form 36 (SF36) (to assess quality of life); and the Holistic Complementary and Alternative Medicine Questionnaire (HCAMQ) ( to assess the impact of attitudes towards both holistic health and also towards complementary and alternative medicine). Results The quantitative data obtained was analysed using the HPSS version 12.0 and the statistical test used was the Wilcoxon signed ranks test for related data; p<0.05 was considered statistically significant. From the gut transit studies it was found that 12 participants had an abnormal (slow) colonic transit time and 6 had a normal transit time.

 patients were asked to rated their change in symptoms using two rating scales. It was found that 83% in the first and 94% in the second rating scale rated their constipation as improved to some extent.  10 out of the 19 participants had improved colonic transit times after the reflexology treatments (fewer markers retained)  The scores from the HCAMQ indicated that of the 19 participants 9 (47%) demonstrated a more positive attitude towards holistic health and 14 (74%) demonstrated a more positive attitude towards CAM. 12 patients (63%) demonstrated a statistically significantly more positive attitude (p=0.03) towards CAM.  Using the HAD outcome measure it was found that 10 patients (53%, p=0.19) demonstrated an improved anxiety score and 11 participants (58%, p=0.14) demonstrated an improved depression score.  The greatest number of patients reporting improvement were seen in general health, followed by mental health categories of the SF36 scale. Vitality was the only subscale to reach statistically significant

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improvement, however, both bodily pain and physical functioning tended towards a statistically significant improvement.  All participants completed the bowel diary prior to the treatments but five were not completed after the intervention. Symptoms reported in the diaries were consistent with the patients assessments conducted by the researcher at the commencement and completion of the study.  Before treatments commenced 15 out of the 19 participants were taking regular laxatives. At the end of the study 12(80%) of these patients had ceased using laxatives and two had greatly reduced their laxative consumption. Data for one participant were missing

Conclusions

The researchers suggest that this pilot study indicates that reflexology has the potential to compare well with biofeedback, which is the most effective treatment in use at present with a reported 70% improvement rate. 94% of patients in the study reported improvements in their constipation to at least some extent following the reflexology treatments and these included bowel frequency, reduction in bloating and use of laxatives, improved sense of wellbeing, more energy and improved sleep.

Comments The researchers suggest that the way the patients were selected could have introduced self selection bias and this could mean this sample was not representative of the whole population. Constipation symptoms varied considerably so the researchers suggested that a patient outcome measurement such as the MYMOP would allow patients to identify their most bothersome symptoms. They finally suggest that “further randomised, controlled trials are required to determine whether reflexology is as effective for improving constipation symptoms and quality of life as biofeedback, and the long-term effects of this treatment.”tipation