

Evidence Based Approaches to Managing Irritable Bowel Syndrome (IBS)

Including :

- Autogenic training meditation method
- Anti-arousal breathing technique
- Specific Dietary guidelines

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This brief review of the latest research into the safe management of IBS suggests that there attention to biomechanical, behavioural, as well as dietary strategies, can commonly be helpful – without medication.

- IBS, has been defined as abdominal pain, experienced more than once a month, associated with bloating and altered bowel habits. (Moore & Kennedy 2000)
- IBS, by definition is 'functional', that is, there is no infection or pathology associated with it. (Abrams et al 2002)
- IBS is more common in women than men, and is often associated with other chronic pelvic pain (CPP) symptoms.
- When IBS is chronic, core muscles (eg, pelvic muscles) may become hyperalgesic with multiple trigger points. (Fall et al 2010)

Stress – not just one cause

Tak & Rosmalan (2010) discuss the role of the body's "stress responsive systems" in what have been termed *functional somatic syndromes*, such as IBS, as involving a "multifactorial interplay between psychological, biological, and social factors."

There is therefore a need to move beyond a search for single causes of most conditions such as IBS, since, like many other complex and difficult-to-treat conditions, they commonly have multi-factorial aetiological features – possibly interacting with predispositions and altered stress-coping functions.

Beales (2004) has described a scenario that highlights multiple contributory factors to functional somatic syndromes:

"Too much sustained, [stress] leads to the loss of internal balance, and results in reduced performance and a mind–body system in overdrive. In this state, the metabolism is struggling and cholesterol, blood sugar and blood pressure are often raised, resulting in ill health. for instance, sufferers from irritable bowel syndrome may also commonly experience back pain, fatigue and loss of libido. Negative emotions, such as frustration and despair, can trigger exhaustion, which in

turn can trigger breathing pattern disorders, as a consequence of the perceived threat to survival eliciting fight, flight or freeze reactions.”

Massage [as well as meditation and various relaxation, and stress management approaches] are indicated. (Moraska et al 2008)

Autogenic training is an excellent, stress reducing form of meditation

Autogenic training (AT) is a form of exercise which combines the best of both relaxation and meditation. The modified AT exercise described below offers an excellent way of achieving effective relaxation

Every day, ideally twice a day, for ten minutes at a time do the following :

- Lie on the floor or bed in a comfortable position, small cushion under the head, knees bent if that makes the back feel easier, eyes closed.
- Practise the breathing exercises described below in these notes, for a few minutes before you start the AT exercise.
- Focus attention on your dominant (say right) hand/arm and silently say to yourself ‘*my right arm (or hand) feels heavy*’
- Try to sense the arm relaxed and heavy, its weight sinking into the surface it rests on. Feel its weight. Over a period of about a minute repeat the affirmation (‘*My arm/hand feels heavy*’) several times and try to stay focused on its weight and heaviness.
- You will almost certainly lose focus as your mind wanders from time to time. This is part of the training in the exercise – to stay focused, so don’t be upset, just go back to the arm and its heaviness which you may or may not be able to sense.
- If it does feel heavy, stay with it and enjoy the sense of release – of letting go – that comes with it.
- Next focus on your left hand/arm where you do exactly the same thing for about a minute.
- Move to the left leg and then the right leg, for about a minute each, with the same messages and focused attention in each, for about one minute each.
- Go back to your right hand/arm and, this time, affirm a message which tells you that you sense a greater degree of warmth there. ‘*My hand is feeling warm (or hot)*’.
- After a minute or so go to the left hand/arm, then the left leg and then finally the right leg, each time with the ‘warming’ message and focused attention. If warmth is sensed stay with it for a while and feel it spread. Enjoy it.

- Finally focus on your forehead and affirm that it feels cool and refreshed. Hold this cool and calm thought for a minute before completing the exercise.
- Finish by clenching your fists, bending your elbows and stretching out your arms. The exercise is complete.
- By repeating the whole exercise **at least once a day** (10 to 15 minutes is all it will take) you will gradually find you can stay focused on each region and sensation.

Overbreathing and colon constriction

Ford et al (1995) have reported on the high incidence of increased colonic tone and dysfunction in hyperventilating individuals.

Hyperventilation/over-breathing (leading to low CO₂ blood levels) produces an increase in colonic tone, and phasic contractility in the transverse and sigmoid regions. These findings are consistent with either inhibition of sympathetic innervation to the colon, or the direct effects of over-breathing on colonic smooth muscle contractility, or both.(Chaitow 2007)

Prather et al (2009) expand on these relationships, in review of the anatomy, evaluation, and treatment of musculoskeletal pelvic floor muscle (PFM) pain in women.

They note that persistent muscle contraction of the pelvic floor, related to noxious visceral stimulation, such as that deriving from endometriosis or IBS, can lead to splinting and pain, with reduction of normal PFM function.

Specifically, they report that viscerosomatic reflex activity may be responsible for increased resting tone of the pelvic floor with reduced ability to fully relax the muscle group as a whole. As a result, they suggest, adaptation occurs via recruitment of global muscles in the region leading to symptoms such as posterior pelvic and low back pain. Prather et al also point out that: *“Proper breathing techniques, while performing exercises and activities, are essential for pelvic floor relaxation..”*

This is also a key to assisting IBS dysfunction – see recommended exercise below.

Antiarousal Breathing exercise

1. Place yourself in a comfortable (ideally seated/reclining) position, exhale FULLY through your partially open mouth, lips just barely separated. This out-breath should be slowly performed. Imagine if that a candle flame is about 6 inches from your mouth and exhale (blowing a thin stream of air) in such a way as to not blow this out. As you exhale count silently to yourself to establish the length of the out-breath. An effective method for counting one

- second at a time is to say (silently) 'one-hundred, two-hundred, three-hundred etc' Each count then lasts about one second.
2. When you have exhaled fully, without causing any sense of strain to yourself in any way, allow the inhalation which follows to be full, free and uncontrolled. The complete exhalation which preceded the inhalation will have created a 'coiled spring' which you do not have to control in order to inhale. Once again count to yourself to establish how long your in-breath lasts. The counting is necessary because the timing of the inhalation and exhalation phase of breathing is a major feature of this exercise.
 3. Without pausing to hold the breath exhale FULLY, through the mouth, blowing the air in a thin stream (again you should count to yourself at the same speed)
 4. Continue to repeat the inhalation and the exhalation for not less than 30 cycles of in and out.
 5. The objective is that in time (some weeks of practising this daily) you should achieve an inhalation phase which lasts for 2 to 3 seconds while the exhalation phase lasts from 6 to 7 seconds - without any strain at all
 6. Most importantly the exhalation should be slow and continuous. It is no use breathing the air out in two seconds and then simply waiting until the count reaches 6, 7 or 8 before inhaling again.
 7. By the time you have completed fifteen or so cycles any sense of anxiety which you previously felt should be much reduced. Also if pain is a problem this should also have lessened.
 8. Apart from ALWAYS practising this once or twice daily, it is useful to repeat the exercise for a few minutes (about 5 cycles of inhalation/exhalation takes a minute) every hour if you are anxious or whenever stress seem to be increasing. At the very least it should be practised on waking, and before bedtime, and if at all possible before meals

Diet and IBS

In a comprehensive review of the subject Heizer et al (2009) suggest that dietary changes are worth attempting in an effort to relieve irritable bowel syndrome (IBS) symptoms.

It is recommended that dietary restrictions should be introduced *one at a time*, beginning with any food or food group that appears to cause symptoms based on the individual's history and/or review of a food diary.

The most effective duration for dietary trials has not been well studied, however 2 to 3 weeks is commonly suggested. A modified exclusion diet, followed by stepwise reintroduction of foods is likely to be more effective in finding problem foods, but it is more time-consuming.

A separate set of notes gives details of this: *Safe self-management of food intolerances and allergies*

Dietary Recommendations

General dietary recommendations for patients with IBS, based on clinical experience, research and anecdotal reports (Heizer et al 2009) include:

- Avoiding large meals
- Reducing lactose (eliminate milk, ice cream, and yogurt)
- Reducing fat to no more than 40 to 50 g/day
- Reducing sorbitol, mannitol, xylitol (mainly “sugarless” gum, read labels)
- Reducing fructose in all forms, including high-fructose corn syrup (read labels), honey, and high-fructose fruits (eg, dates, oranges, cherries, apples, and pears)
- Reducing gas-producing foods (eg, beans, peas, broccoli, cabbage, and bran)
- Eliminating all wheat and wheat-containing products
- A diet low in fermentable oligo-, di-, and monosaccharides and polyols
- Eliminate wheat, banana, corn, potato, milk, eggs, peas, and coffee

Herbs and IBS

Peppermint oil Research suggests that use of peppermint oil, particularly in cases of relatively mild IBS is likely to be of benefit in symptomatic treatment of IBS. (Capello et al 2007)

Turmeric (Curcumin) While some studies have shown potential benefit for use of turmeric in treatment of IBS (a member of the ginger family of plants), no placebo controlled studies have been conducted. (Heizer et al 2009)

Probiotics and IBS

The conclusions of a review of the evidence for use of probiotics in both IBS and Inflammatory Bowel Disease (IBD) are cautiously positive. (Iannitti & Palmieri 2010) Two meta-analyses (Nifkar et al 2008, McFarland & Dublin 2008)) and two comprehensive narrative reviews (Wilhelm et al 2008, Spiller 2008) on the use of probiotics in the treatment of IBS. All concluded that probiotics may be useful but there are many variables affecting the results such as the type, dose, and formulation of bacteria comprising the probiotic preparation, the outcome measured, as well as size and characteristics of the IBS population studied.

Summary

IBS is common. Patients with this condition may respond well to stress reduction, better breathing patterns, biomechanical normalisation (pelvic structures) and trigger point deactivation. There is more on the topic of pelvic pain in general, enhanced breathing strategies, and manual therapy, on my website: www.leonchaitow.com, as well as on my blog: <http://chaitowschat-leon.blogspot.com/>

References

- Abrams P, Cardozo L, Fall M, et al. 2002 The standardisation of terminology of lower urinary tract function: report from the Standardisation Subcommittee of the International Continence Society. *Am J Obstet Gynecol* 187:116–126.
- Beales D 2004 “I’ve got this pain ...” *Human Givens Journal*. 11(4):16-18
- Cappello G, Spezzaferro M, Grossi L et al 2007 Peppermint oil (Mintoil) in the treatment of irritable bowel syndrome: A prospective double blind placebo-controlled randomized trial. *Dig Liver Dis*.39:530-536.
- Chaitow L 2007 Chronic pelvic pain: Pelvic floor problems, sacroiliac dysfunction and the trigger point connections. *Journal of Bodywork and Movement Therapies* 11 (4): 327-339
- Fall M, Baranowski A, Elneil S et al . 2010. EAU guidelines on chronic pelvic pain. *European Urology* 57 (1):35-48
- Ford M Camilleri M Hanson R 1995 Hyperventilation, central autonomic control, and colonic tone in humans *Gut* 37:499-504
- Heizer W Southern S McGovern S 2009 Role of Diet in Symptoms of Irritable Bowel Syndrome in Adults: A Narrative Review *Journal of the American Dietetic Association* 109(7):1204-1214
- Iannitti T Palmieri B 2010 Therapeutical use of probiotic formulations in clinical practice *Clinical Nutrition*, In Press, Corrected Proof, Available online 23 June 2010
- Prather H Dugan S Fitzgerald C et al. 2009 Review of Anatomy, Evaluation, and Treatment of Musculoskeletal Pelvic Floor Pain in Women. *Physical Medicine and Rehabilitation* 1(4):346-358
- Moore J Kennedy S 2000 Causes of chronic pelvic pain *Baillie're's Clinical Obstetrics and Gynaecology* 14(3) 389-402
- Moraska A Pollini R Boulanger K et al 2008 Physiological adjustments to stress measures following massage therapy: A review of the literature. *Evidence Based Complementary Alternative Medicine*. doi: 10.1093/ecam/nen029
- Riot, F.-M., Goudet, P., Moreaux, J.-P., 2005. Levator ani syndrome, functional intestinal disorders and articular abnormalities of the pelvis, the place of osteopathic treatment. *Presse. Medicale* 33 (13), 852–857.
- Tak L Rosmalen J 2010 Dysfunction of stress responsive systems as a risk factor for functional somatic syndromes *Journal of Psychosomatic Research* 68(5):461-468