A recent study has been published in the American Journal of Gastroenterology; it looked at sympathetic nervous system activity during sleep and the results suggest that patients with IBS show the presence of autonomic abnormalities.

TESTS:

Blood tests to exclude anaemia and inflammation (inflammatory bowel disease such as Ulcerative colitis or Crohn's disease)

Faecal occult blood (to exclude GI bleed)

Flexible sigmoidoscopy: using a telescope in a tube to visualise the interior of the gut in the lowest part of the colon.

Other tests include:

- Lactose tolerance evaluation
- Anal canal pressure or EMG to check for pelvic floor muscle dyssynergia (uncoordinated muscle action)
- Whole gut transit time: to check for colonic inertia (in C-IBS)
- Dextrose breath test: to check for bacterial overgrowth
- Small bowel X-rays: if inflammatory bowel disease suspected
- Colonoscopy: views the entire colon: checks for right-sided inflammatory bowel disease
- Stool test for ova (eggs)/parasites

TREATMENT OPTIONS:

There is no easy solution to the problems caused by IBS.

Management approaches tend to aim at symptomatic relief at gut level, alongside any necessary ?central' treatment to modify pain pathways in the central nervous system.

Simple non-drug measures:

Diet:

- Cutting down on caffeine and alcohol intake may be helpful
- 'Healthy' diet taken as small frequent meals is recommended.
- Some patients may benefit from an increase in dietary fibre, whilst others may benefit from a reduction. Recommended daily fibre intake for healthy individuals is 20 to 35 grams per day: fruit, vegetables, cereal and grain.
- Triggers to symptoms may be identifiable in some patients (e.g. lactose, dairy products, high fat foods, rich or spicy foods, bread and cereals) Strict exclusion diets however, tend to have poor success rates, can be difficult for the patient and should be supervised by a dietician.
- Constipation may respond to increased dietary fibre (e.g. wholemeal rice, pasta, vegetables) and increase in fluid intake. However, some patients experience worsening of symptoms with fibre, particularly wheat bran - derived fibre,
- Diarrhoea may respond to reduced dietary fat, tea, coffee and reduced cigarette smoking.
- Pain and spasm may respond to reduced tea and coffee.

Lifestyle:

- Stress management and hypnosis may be effective in some patients.
- stopping smoking may also be beneficial.

Drug Treatments: symptomatic not curative

- Most drugs used to treat IBS are not studied specifically for this condition, and have limited success rates as compared with placebo in studies. It is important to balance this with the side-effect profiles of the drug.
- Using 'as required' rather than regular treatment may be more suitable for those with intermittent symptoms.

Laxatives

- Bulk laxatives (e.g. ispaghula - a soluble fibre) and stool softeners (e.g. docusate) are recommended only for patients who have a component of constipation. These are proven as effective laxatives but their efficacy in IBS has yet to be proved. Lactulose may be effective, but can cause nausea and may exacerbate abdominal distension.
- Bran may cause distension and worsen pain if used indiscriminately: up to 55% of patients with IBS who take bran experience worse symptoms. Ispaghula is less likely to cause these side effects. Patients with predominant constipation are most likely to benefit from a high fibre intake.
- Docusate, a stool softener, is an alternative laxative that may be helpful (use for up to one week).
- Some patients find over the counter laxatives helpful.
- Regular, long-term use of stimulant laxatives can lead to permanent laxity of the gut muscles (they become ?lazy') once use is discontinued, therefore is NOT recommended.

Antidiarrhoeal agents

- Loperamide (Imodium) reduces stool frequency, improves stool

consistency and reduces pain intensity in IBS patients with diarrhoea.

- Other antimotility drugs include codeine phosphate (Diarrest) and diphenoxylate (Lomotil).
- There is considerable variation in the dose requirements, which need to be decided upon on an individual basis, "as required use" often being appropriate.

Antispasmodics

- Direct intestinal smooth muscle relaxants such as mebeverine (Colofac), alverine (Spasmonal) and peppermint oil (Colpermin) may be useful as a treatment for pain and spasm. It is possible to use combination preparations such as Fybogel Mebeverine
- Peppermint oil is a common component of over the counter preparations for IBS, and is thought to act by causing relaxation of smooth muscle.

Studies suggest that it is most helpful in reducing lower GI tract symptoms.

- Antispasmodics seem to be used in trials of one month in most published studies, but there is no consensus as to the optimum duration of treatment.
- Side effects are usually minor, nausea, headache, itching and rash having been reported. Occasionally, there may be a sensitivity to menthol. (in Colpermin)
- Antimuscarinics such as hyoscine and dicyclomine are sometimes helpful, but have potential for anticholinergic side effects.
- They should be used with caution in patients with GORD, diarrhoea, Ulcerative colitis, hyperthyroidism and other conditions which cause rapid heart rate; hypertension.
- They are contraindicated in patients with closed-angle glaucoma, and prostatic enlargement, (also, paralytic ileus and pyloric stenosis).

Antidepressants

- These are NOT a first line treatment, but should be reserved for patients who have failed to gain any relief from the treatments outlined above.
- Antidepressants are not directly analgesic, but are often used to treat pain.
- Tricyclic antidepressants such as amitryptiline may help to relieve spasm via anticholinergic effect, which is entirely independent of their antidepressant effect. They tend to be constipating, so may be of more use in D-IBS. Doses lower than those for depression are used in IBS (providing there is no co-existing depression).Therapeutic effect tends to begin within the first 7 days (unlike any antidepressant effect which usually takes about

21 days)

- The role of SSRIs (specific serotonin re-uptake inhibitors) such as Prozac, Sertraline has not yet been evaluated, but as they tend to cause diarrhoea as a side-effect, they may be more suitable than the tricyclics for patients with C-IBS. Studies in the US are currently evaluating serotonin agents with promotility actions. Cisapride, a 5-HT 4 agonist/5-HT 3 antagonist, was used to enhance motility in the upper GI tract but has been withdrawn (see above).