

IBS & Ayurveda

Dr. Mohan Joshi,
MS, FCPS, MNAMS, FAIS
Professor Surgery, In-charge GE and Endoscopy Clinic ,
L. T. M. Medical College, Sion,
Mumbai 400022

Presented CME. Organized by IMA, Mumbai Branch at Haji Ali on 13/2/2011

Irritable bowel syndrome (IBS) comprises of many different types of clinical presentations. It may be case of spastic colon or a spastic colitis or a mucus colitis presenting as an irritable bowel. Entire gastro intestinal tract starting from esophagus, stomach, gall bladder, small bowel and large bowel is made of smooth muscles. It is basically a functional disorder affecting the motility and contractility of these smooth muscles coating the bowel is the cause of IBS. It may be due abnormal functioning of spinal nerves, higher CNS centers and also the autonomous nerves. Due to this factor the stretch reflexes in the bowel become powerful. Apart from neural dysfunction certain other factors also play a great role in IBS. Inability to digest certain foods, e.g., deficiency of enzyme lactose dehydrogenase, can result in milk intolerance. Thus milk products, chocolates and alcohol, caffeine and carbonated drinks also trigger the IBS. Fatty foods cause slow expulsion of gases leading to retention of gases in the bowel. Stress is also known to trigger IBS. Functions such as mixing of the food with juices secreted, grinding and chiefly the transportation of the food are impaired. Absorption though is also minimally affected.

Incidence of this condition is any where between 15-20%. Despite different modes of therapies that include medical, surgical and counseling majority of the patients are not completely cured and the condition more often recurs. It is a frustrating experience to both patient and the treating physician equally.

Symptoms are mainly bloating and distention of abdomen and cramps and pain associated with nausea, vomiting and esophageal reflux. Usually patient is malnourished with weight loss and low levels of serum calcium.

Diagnosis is clinical as per the ROME II criteria. Change in frequency and consistency of the stools associated with bloating of abdomen and relief of pain in abdomen after defecation is diagnostic of this condition. Sensation of unsatisfactory evacuation associated with urgency and passage of mucus are note worthy. Frequency of stool more than three times a day or less than three per week bowel motions are consistent with diagnosis of irritable bowel.

Exclusion of organic disease in bowel is pre requisite for diagnosis of Irritable bowel. Most important investigations are routine stool examination, sonography of the full abdomen and colonoscopy, gastroscopy and barium meal and enema.

Treatment of IBS:

If a patient's complaints are predominantly associated with constipation, cisapride and tegaseride are the drugs of choice. If patient complains of diarrhea more often the choice of the drug is loperamide. Intestinal microflora plays a great role in physiological and pathological states of the GI tract. Probiotics therefore are now considered important in the treatment of IBS with over growth of altered microflora.

Both cisapride and tegaseride are fraught with severe hepatic and renal impairment. Adverse reactions include GI upsets including diarrhea, hypovolemia and hypotension, syncope needing rehydration. Headache, hematological changes and alopecia elevation of SGOT, SGPT and bilirubin are other known serious side effects. Rarely ischemic colitis and intestinal ischemia are observed with these drugs. Loperamide is associated with CNS toxicity leading to dizziness and drowsiness. Adverse reactions are paralytic ileus, bloating and rash, nausea abdominal discomfort and cramps.

Therefore I looked in to alternative therapy in the form of Cap. Enteropan promoted by Dr. Palep's Medical Research Foundation. I have studied in my department two hundred patients that included twenty female patients after thoroughly investigating them by ROME II criteria. All patients' history was noted and routine laboratory investigations including stool examination, LFT and RFT were performed. All of them underwent mandatory investigations, viz., sonography of the full abdomen and colonoscopy, gastrscopy and barium meal and enema. Diagnosis of IBS was confirmed and they were put on single therapy of Cap. Enteropan in the dose of one capsule thrice daily 15 minutes before food was advised uniformly. All patients were called for repeat interrogation on day 15, 30 and 60 and their condition was re assessed.

Results:

Ninety percent of the patients, i.e., 180/200 reported at the end of study, diminished bloating of abdomen, easy flow of gases and satisfactory evacuation of the bowel. Seventy five percent of the patients reported improved appetite. In 20% of patients, proton pump inhibitors and alprazolam needed to be supplemented. Out of this only ten patients responded and rest ten did not show improvement.

Ingredients of Enteropan:

1. Kutaj (*Holarrhena antidysenterica*)
2. Ativisha (*Aconitum heterophyllum*)
3. Musta (*Cyperus rotundus*)
4. Bilwa (*Aegle marmelos*)
5. Dadim (*Punica granatum*)
6. Jatiphal (*Myristica fragrance*)
7. Usheer (*Vetivera zizanoids*)
8. Dhanyaka (*Coriandrum sativum*)
9. Shuthi (*Zingiber officinalis*)

Mechanism of action:

Holarrhena antidysenterica (Kutaj): It is used to combat diarrhea and dysentery from time immemorial. Vagbhata has described it as best drug for diarrhea. In chr.amoebic dysentery a very good response is shown in almost 70% cases in reported clinical trials and also in those cases of stool examination showing cysts of *Entamoeba histolytica* and also in giardiasis.

Aconitum heterophyllum (Ativisha): It is different from poisonous bulb of Aconite (*Aconitum ferox*). It is non poisonous. Tubers are heated with cow dung and later dried in sun and thus are

purified. It is used in pediatric practice traditionally. It is called shishu beshaja. It is advised in cases of dyspepsia, fever and vomiting, diarrhea, hemorrhoids and helminthiasis. It is astringent and a bitter tonic. It is prophylactic in periodic fevers, e.g., Malaria.

Cyperus rotundus (Musta): Charak has described it for diarrhea, poor appetite and for skin infections. It is especially useful in mucus diarrheas and fever. It's of anti-inflammatory, analgesic and antihistaminic and also has anti-emetic property reported in experimental animals. (Gupta M. et al: Ind.J.pharm., 2:23 (1970).

Aegle marmelos (Bilwa): It is described by Charaka as a rasayana. Its fruit pulp contains chiefly mucilage pectin like substance. Its antimicrobial activity envelops anti-bacterial and fungal spectrum. (Jain N.k.: Ind. Drugs pharm Ind., 12:55 (1977). It is an ideal agent in case of dysentery and diarrhea with loose stools. Even British pharmacopeia has included it in anti-chr. diarrhea and dysentery therapeutics. It is effective in giardiasis. Molecular target of Bilwa is now identified as inhibition of nitric oxide (NO).

Punica granatum (Dadim): Astringent action of fruit rind explains its anti-diarrheal action. It has excellent anti-microbial and anti-viral action due to the presence of a phytochemical, punicalin. It is successfully used in cholera in African countries. Currently its molecular target identified is through inhibition nuclear factor kappa B (NFkB).

Myristica fragrance (Jatiphal): It is a fragrant food item. It is taste enhancer, appetizer. It is a deodorant, analgesic and carminative, astringent and anti-helminthic. It prevents thirst and nausea. It is used in diarrhea and also in cholera.

Vetiveria zizanioids (usheer): It is antipyretic, coolant and deodorant. It is useful in acid-peptic disease due to its property of reducing the acid secretion in the stomach. It reduces thirst and burning micturition.

Coriandrum sativum (Dhanyak): It is a common kitchen item in the Indian households. It is used as appetizer, digestive and astringent, hepato-stimulant and anti-helminthic. It is useful in preventing diarrhea with colicky pains. It is an astringent. It inhibits the molecular genes NFkB, AP-1, JNK, MAPK.

Zingiber officinale (Shunthi): It is again common kitchen item. Gingerol is a potent inhibitor of prostaglandin synthesis and is thus anti-inflammatory in action. It has a potent anti-histaminic and anti-emetic action comparable to Dramamine. It has anti-microbial and anti-viral properties. It is a good appetizer and digestive. It is very good home remedy for nausea and dyspepsia. It inhibits number of genes at the molecular level. These include NFkB, iAP1, XIAP, Bfi-1/A1, BCL2, cFLIP, Survivin, Cyclid1, C-Myc, MMP-9, COX-2, TRAF1.

Discussion: As it can be seen from above described information many of the ingredients are commonly used food articles. Cap. Enteropan was well tolerated by all patients with no adverse side effect whatsoever in any of the patients. Considering the number of serious adverse reactions with current modern therapy Cap. Enteropan offers better results in cases of IBS. Hence in conclusion I have no hesitation in recommending it to all my patients suffering with IBS.