Herbal Treatment of Irritable Bowel Syndrome and Inflammatory Bowel Disease

by Paul Michael BA BSc MNIMH

Introduction

The main difference between IBS (Irritable Bowel Syndrome) and IBD (Inflammatory Bowel Disease) is that the former is a functional disorder with no structural changes, and the latter a functional and structural disorder with pathological changes occurring. People suffering from these diseases can be greatly affected, both psychologically and physiologically, resulting in a constant struggle for a better quality of life. Even though we can consider IBS to be less severe than IBD, the effects can still be disabling. However, patients suffering from IBD do not only have to cope with the disastrous effects of the disease, but also have to deal with the side-effects of the potent drug treatments used.

Irritable Bowel Syndrome

The symptoms of IBS include; diarrhoea, constipation, abdominal spasm, bloating, and sometimes the presence of mucus in the stools. Many people have bouts of diarrhoea that alternate with bouts of constipation, and the pain felt can be mild to severe.

Inflammatory Bowel Disease

Crohn’s disease and ulcerative colitis fall under the category of IBD. They are chronic inflammatory diseases and the symptoms include; chronic bloody diarrhoea with mucus, fever, malaise, weight loss, abdominal pain, and anaemia if the blood loss is severe or prolonged. Crohn’s disease can affect any part of the digestive tract, from the mouth to the anus, with the most common site being the terminal ileum. Ulcerative colitis only affects the colon and rectum.

Many of the symptoms of IBS and IBD are similar, but unique to IBD are the actual pathological and morphological changes, which are evident in the ulceration that occurs.

Herbal Treatment of IBS and IBD

It is important to state that herbal medicines are not orthodox drugs; they are not to be viewed or used in the same way. In herbal medicine a single herb is almost never used on its own to treat an ailment. Several herbs are usually combined together to produce a formula, and in most cases are given either in liquid form, or in the form of a tea. In herbal medicine the concept of synergy is a very important one. Indeed, the philosophy and mode of action of herbal medicines is very different to conventional medications. Many herbs are often needed, as each one will be targeted at a specific pathway involved in the disease process and not on a purely symptomatic level. In this way, the deeper-seated endocrinological (hormonal), metabolic and nervous system dysfunctions are addressed, thus bringing about greater therapeutic change.

Different Levels of Treatment

In IBS and IBD, herbal medicines can be used therapeutically on different levels. These levels of treatment, starting with the simplest to the most complex are:

1. Symptomatic treatment;
2. Drainage of the organs of elimination;
3. Nervous system; specifically the treatment of autonomic nervous system dysfunction;
4. Endocrine system; treatment of underlying endocrine imbalances.

1. Symptomatic treatment

**Anti-spasmodics and astringents**

Symptoms such as diarrhoea and spasm, which occur in IBS and IBD, can be treated with astringent and anti-spasmodic herbs. Astringents, used in the treatment of diarrhoea,
work by tightening the mucous membrane of the intestines thus reducing secretion and excretion. Such herbs include agrimony and sage. To relieve spasm, anti-spasmodics such as chamomile and peppermint may be used. This symptomatic level of treatment may bring about some relief, but will not bring about a lasting therapeutic change.

- **Anti-inflammatory**

In addition to astringents and anti-spasmodics, anti-inflammatory herbs are crucial in dealing with the chronic inflammation that occurs. This chronic inflammation causes many of the symptoms seen in IBD. One such herbal anti-inflammatory is licorice root, which works in part by prolonging the life of cortisol (a powerful anti-inflammatory and vital stress control hormone produced in the body). Studies have also shown that licorice root inhibits the activity of phospholipase A2, as well as inhibiting cyclooxygenase and prostaglandin formation. Its anti-inflammatory action has been likened to that of hydrocortisone. Indeed in many IBD patients the adrenal gland (a gland situated above the kidneys which produces cortisol) may not be functioning properly due to underlying hormonal imbalances or chronic stress, from the disease itself. Also, the adrenal gland may be affected by long-term steroid use, again resulting in a diminished production of cortisol. In such cases licorice root and blackcurrant bud are vital in supporting and restoring proper function to the adrenal glands.

Frankincense is another herb that shows promising results in the treatment of IBD. Clinical trials have shown beneficial results when using preparations of frankincense in the treatment of a number of chronic inflammatory diseases, including Crohn’s disease and ulcerative colitis. Boswellic acids found in frankincense (Boswellia serrata) were found to inhibit 5-lipoxygenase, a key enzyme involved in the inflammatory process in colitis. In a study involving 30 patients suffering from chronic colitis, 20 patients were treated with frankincense resin and ten with sulfasalazine for six weeks. Seventy percent of the patients treated with frankincense resin went into remission, as opposed to 40% of patients on sulfasalazine.

- **Mucus Membrane**

**Trophorestoratives**

Mucus membrane trophorestoratives, which are an important group of herbs, also find their way into the armoury of the herbalist in the treatment of IBD. These herbs help to restore the integrity of the mucus membrane of the intestines, thus preventing antigens from penetrating it and causing inflammation. Such herbs include golden seal and ground ivy. Golden seal has the added benefit of being anti-microbial and haemostatic, so is useful in the treatment of gastric infections and blood loss.

- **Drainage**

If a healthy digestive system is to be maintained with proper absorption of nutrients, then it is imperative that the organs involved in all stages of digestion function properly. The right amount of hydrochloric acid (HCL), digestive enzymes, which are secreted from the pancreas and bile, are essential for proper breakdown and emulsification of foods. This ensures that undigested foods that can potentially irritate the intestines further along the digestive tract and cause inflammation get properly broken down.

Often, the pancreas, liver and gallbladder can become congested, and the proper drainage of these organs can be of great value in the treatment of IBS and IBD. Many of the herbs used in the drainage of these organs are classed as bitters, or have a bitter element to them. These include agrimony, fumitory, burdock root, green walnut leaf, wormwood, dandelion root and globe artichoke. The main way that bitters work is by reflex action. Once the tongue detects the bitter taste, the digestive organs are stimulated and drainage occurs.

Globe artichoke is a potent herb used in the drainage of the liver and gallbladder. In fact, its choleretic action (its ability to increase the flow of bile from the liver) was found to last longer than that of sodium dehydrocholate (bile salt); also an increase in the excretion of cholesterol and solids in the bile were found. An advantage that Globe artichoke has over bile salts is that it stimulates the liver to produce more bile without impairing its excretory function. The way in which Globe artichoke leaf exhibits its choleretic action is by increasing the number and size of the bile...
If a patient is highly stressed they will have a high alpha sympathetic activity, which may cause contraction of the digestive sphincters, leading to constipation. If a patient presents with an increase in mucus secretions, diarrhoea and spasm, then parasympathetic activity may be high.

3. The Autonomic Nervous System

The nervous system, specifically the autonomic nervous system, plays a major role in both IBS and IBD. It either increases or decreases the secretions from the digestive organs, and increases or decreases the motility of the intestines. If there is a dysfunction of the autonomic nervous system, then some of the symptoms seen in IBS and IBD present themselves. Furthermore, dysfunction of the autonomic nervous system affects the endocrine system and vice versa. If a patient is highly stressed they will have a high alpha sympathetic activity, which may cause contraction of the digestive sphincters, leading to constipation. If a patient presents with an increase in mucus secretions, diarrhoea and spasm, then parasympathetic activity may be high. However, this is a simple illustration of the intricate autonomic nervous system which has a much more complex relationship between alpha, beta and parasympathetic activity. Regulation of the autonomic nervous system can bring about relief of symptoms, but involves a deeper level of treatment to those mentioned earlier.

Some examples of herbs that can affect the autonomic nervous system are:

- **Herbs that decrease parasympathetic activity:**
  - Chamomile
  - Thyme

- **Herbs that decrease alpha sympathetic activity:**
  - Lavender
  - Lemon balm

- **Herbs that increase beta sympathetic activity:**
  - Blackcurrant bud
  - Licorice root

4. The Endocrine System

On the deepest level of treatment, one must look at the endocrine system, which is the global manager of the body. According to Dr C Duraffourd, in Crohn’s disease, there is an insufficient thyroid activity, which results in an increase in TSH (Thyroid Stimulating Hormone) to meet the demand created by FSH (Follicle Stimulating Hormone). This causes a compensatory metabolic shift away from glucose to lipids. As a result, there is a disturbance in liver function, which causes a change in the intestinal micro flora causing dysbiosis and thus, chronic inflammation.

If we are to consider these endocrine imbalances, then of course we must consider how best to correct them without using aggressive treatments that may block certain hormones, and in so doing cause other problems. Using herbal medicines one can gently bring about lasting therapeutic change. The complex nature of the agents that cause disease are perfectly matched by the complex nature of plant medicines.

Some examples of herbs that can affect the endocrine system are:

- **Herbs that decrease FSH levels:**
  - Gromwell
  - Borage

- **Herbs that improve thyroid function:**
  - Oat seed
  - Bladderwrack

**Conclusion**

As seen above, there are many levels of treatment. Some patients may find benefit from only the first one or two levels. However, for others it may be necessary to treat at the deeper third and fourth levels described, in order to provide effective relief from the complex disease processes involved. The correct identification of the mechanism of disease, or at the very least the pathways involved, as well as the correct choice of plant medicines, is crucial in providing successful treatment.

**References**


Bibliography


About the Author
Paul Michael BA, BSc, MNIMH is a graduate of the Herbal Medicine degree programme at Middlesex University and a member of the National Institute of Medical Herbalists (NIMH). He lives in East Barnet, North London, and may be contacted via Tel: 07930 316196; pavlosmichael@btinternet.com

Further Information
Middlesex University’s Medicinal Herb Garden Website is highly informative: www.hebes.mdx.ac.uk/teaching/learning/Garden/

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