

Herbs for the Treatment of Chronic Inflammation & Autoimmune Disorders

Rehmannia

Rehmannia glutinosa is the most important Chinese herb for disorders of the kidneys and adrenal glands. The uncured root is regarded as antipyretic, haemostatic and able to remove latent heat from the blood. It is prescribed in febrile diseases, conditions of deficient body fluids, mouth sores, haematemesis, haematuria and metrorrhagia.^{1,2} Rehmannia contains a number of constituents including iridoid glycosides.¹

Rehmannia has a similar tonic effect on the adrenal cortex as Licorice, it appears to antagonize the depression of this gland caused by steroid hormones. It also inhibits the breakdown of cortisone products in the body, thereby extending their effects.³ The anti-inflammatory effect of Rehmannia occurs via the adrenal glands, which is similar to Bupleurum. Rehmannia given orally to mice abolished the suppressive effects of cyclophosphamide on spleen and thymus indices, serum haemolysin level and lymphocyte transformation rate. It also abolished the suppressive effects of dexamethasone on the phagocytic activity of peritoneal macrophages in mice.⁴ Oral doses of dexamethasone in rabbits drastically reduced serum corticosterone levels. Adding Rehmannia one week after dexamethasone increased serum corticosterone levels significantly. Rehmannia also prevented or reversed morphological changes in the pituitary and adrenal cortex by antagonizing the suppressing effect of glucocorticoids on the hypothalamic-pituitary-adrenal axis.⁵

In a clinical study patients with rheumatoid arthritis were treated with Rehmannia decoction. Good results were found in most patients, as evidenced by abatement of joint pain, reduction of swelling, improvement of joint movement and normalisation of erythrocyte sedimentation rate. Rehmannia also improved the general symptoms of asthma and urticaria. In a small percentage of patients mild oedema developed – a similar reaction to that induced by adrenocortical hormones.³

Bupleurum

Bupleurum falcatum is the main Chinese herb used for liver disharmony. Bupleurum is anti-inflammatory,

adaptogenic, hepatoprotective, antitussive and a mild sedative. Bupleurum is indicated for liver stasis, hepatomegaly, splenomegaly, indigestion and common cold with chills and fever. It is also important for debility and prolapse (often combined with Astragalus).^{1,2}

The main constituents are the triterpenoid saponins known as saikosaponins.¹ Injection of saikosaponin a and saikosaponin d in rats demonstrated anti-inflammatory activity, potentiated the activity of cortisone,⁶ and stimulated ACTH secretion from the pituitary thereby indicating stimulation of endogenous production of cortisol.⁷ Anti-inflammatory activity has also been demonstrated from oral administration of saikosaponins (100 mg/kg).⁸ Adrenal gland weight increased in proportion to the dosage of saikosaponins (by injection).³ Injection of saikosaponins increased protein synthesis in the liver.⁹ Saikosaponins have shown an inhibitory effect on prostaglandin E₂ production.¹⁰ (PGE₂ promotes inflammation in the body.) Bupleurum has been found useful in experimental immune damage to kidneys.¹¹ Bupleurum has a slight sedative effect in some patients, and can occasionally cause nausea and reflux. It may also increase bowel movements and flatulence.¹

Hemidesmus

Hemidesmus indicus root is regarded in Ayurvedic medicine as a depurative and tonic. It has been used to treat chronic rheumatism, kidney and skin disorders and constitutional debility. It is also known as Indian Sarsaparilla.¹² Its main action is the depression of the immune function.

In a series of tests, oral administration of ethanol extract of Hemidesmus decreased both the cell-mediated and humoral components of the immune system in mice.¹ This activity would be of benefit in autoimmune disorders.

Feverfew

A survey conducted in the early 1980s regarding the use of Feverfew (*Tanacetum parthenium*) found that many migraine patients suffering from arthritis also found their arthritic symptoms somewhat relieved by Feverfew. Some

side effects such as mouth ulcers occurred in a small percentage of patients. In contrast a percentage of users experienced improved digestion, a sense of well being and improved sleep.¹³ Despite this, conflicting results have been obtained in clinical trials for the use of Feverfew in migraine.^{14,15} Overall benefit was not demonstrated in one rheumatoid arthritis trial, but grip strength was increased in feverfew patients compared to baseline and placebo group.¹⁴

Feverfew is traditionally used as a bitter tonic and to relieve facial pain in rheumatic patients.¹

Active constituents are the sesquiterpene lactones, especially parthenolide. A likely mechanism of action is the inhibition of granule secretion from platelets (antimigraine effect) and polymorphs (antiarthritic effect).¹⁶ Other proposed mechanisms include:

- inhibition of prostaglandin production;¹⁷
- inhibition of NF-kappaB, a mediator of the inflammatory process.^{18,19}

(Most of these results were obtained from *in vitro* studies and *in vivo* studies where parthenolide was administered by injection.)

Purchase of good quality reliable standardised Feverfew products is important to ensure therapeutic benefit. In 2002 an assay of selected US products found large variations in the parthenolide content.²⁰

Synergistic Formulation

These herbs would complement each other in a very potent formulation with the following actions:

- anti-inflammatory (especially for chronic conditions),
- reduces the symptoms of immune dysfunction,
- management of dysfunctional immune states.

Indications

- Chronic inflammation.
- Autoimmune diseases such as rheumatoid arthritis, systemic lupus erythematosus, ankylosing spondylitis.
- Migraine or headaches, especially where there is liver involvement.

Cautions and Contraindications

Contraindicated in those with known hypersensitivity to Feverfew, parthenolide or other members of the Composite family. Doses during pregnancy should be kept to a maximum of 300 mg/day of dried feverfew.

REFERENCES

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