

Herbs for the Treatment of the Symptoms of Menopause

Wild Yam

The root and rhizome of *Dioscorea villosa* has traditionally been used to treat spasmodic conditions of the female reproductive tract. *Dioscorea villosa* contains the steroidal saponin dioscin,¹ as do many *Dioscorea* spp. Commercial 'wild yam' extracts made available for use as raw materials in Australia are often not *Dioscorea villosa*, they are often standardised to diosgenin – the aglycone of dioscin – rather than to the steroidal saponin as expected. These extracts are often botanically undefined, and are commonly the Chinese yam, *Dioscorea opposita*. These extracts also often do not contain the full spectrum of phytochemicals expected from a good quality herbal extract.²

Wild Yam is popularly, yet incorrectly, accredited with providing progestogenic activity. Diosgenin, the aglycone of dioscin, is not metabolised in the body to produce progesterone.³ Very low levels of progesterone were found in saliva of women using Wild Yam products, and Wild Yam appeared to suppress progesterone synthesis.⁴ Diosgenin demonstrated oestrogenic properties, but lacked progestogenic effects, in an experimental model after subcutaneous administration.⁵ This emphasises the possibility that Wild Yam is in fact oestrogenic (see below).

Mechanism of Action

Steroidal saponins may exert oestrogenic effects by binding with oestrogen receptors of the hypothalamus (part of the negative feedback mechanism of oestrogen control). Hence, in the low oestrogen environment of peri- and postmenopause, Wild Yam may alleviate symptoms of oestrogen withdrawal. (The selective binding may reduce the hypothalamus-mediated symptoms by convincing the body that more oestrogen is present in the bloodstream than actually is.)

Black Cohosh

Cimicifuga racemosa (*Actaea racemosa*) root and rhizome has been used traditionally to treat female reproductive disorders such as dysmenorrhoea, amenorrhoea and ovarian pain. It is also regarded as antirheumatic, of benefit in myalgia and arthritis.^{1,14}

An important class of compounds isolated from the root/rhizome is 9,19-cycloartane triterpene glycosides. More than 20 of these glycosides have been isolated, with 27-deoxyactein (23-epi-26-deoxyactein) as one of the major constituents. This compound is commonly used as a marker compound for calculating the total triterpene content in commercial preparations.⁶

Black Cohosh preparations have been clinically investigated in Germany indicating success in the treatment of menopausal symptoms, with the trials, postmarketing studies and case reports dating back to the 1950s.^{7,8} Not all results have been convincing however, in a trial involving breast cancer patients who had completed primary medical treatment, Black Cohosh was not significantly more efficacious than placebo.⁹ This trial has been criticised for its short duration (2 months),¹⁰ and another later trial using the same dosage, conducted over 12 months found Black Cohosh reduced the number and severity of hot flashes/flushes in women surviving breast cancer.¹⁰ Black Cohosh was found to have equipotent activity on climacteric complaints and bone metabolism compared with conjugated oestrogens in a double blind, placebo-controlled trial involving postmenopausal women. Unlike the oestrogens, Black Cohosh did not have an effect on endometrial thickness. The authors proposed that Black Cohosh has selective oestrogen receptor modulator (SERM) activity, which means it produces the desired effects in the hypothalamus, in bone and vagina, but without exerting undesirable uterotrophic effects.¹¹

Two reviews published in the journal of the North American Menopause Society in 2003 concluded that Black Cohosh is a safe herbal medicine for the treatment of menopausal symptoms.^{12,13}

St John's Wort

The aerial parts of *Hypericum perforatum* have traditionally been used as a nervine tonic, particularly in the treatment of menopausal neurosis, excitability, hysteria and nervous conditions with depression.^{1,14}

In an observational study improvement in psychological and psychosomatic symptoms were observed in pre- and postmenopausal women after treatment with standardised

St John's Wort extract. Climacteric complaints decreased or disappeared in the majority of women, and sexual well-being improved.¹⁵

A preparation containing standardised extracts of St John's Wort and Black Cohosh significantly reduced menopausal symptoms compared to placebo in a randomised, double-blind trial.¹⁶

Shatavari

Asparagus racemosus root is regarded in Ayurveda as an aphrodisiac and a female reproductive tonic with a rejuvenative action. Shatavari is traditionally said 'to give the capacity to have a hundred husbands'. In addition to promoting conception it has been used for the treatment of menopause. It is an effective demulcent for dry and inflamed membranes of the lungs, stomach, kidney and sexual organs,¹⁷ hence it may be of benefit for the treatment of vaginal dryness in menopause.

Shatavari is also regarded as a remedy from the *rasayana* group. *Rasayana* literally means the path that *rasa* or the primordial tissue takes. A remedy that improves the quality of *rasa* should strengthen or promote the health of all tissues of the body.¹⁸

The constituents of Shatavari are not well characterised but it is known to contain steroidal saponins,¹⁹ which support a subtle oestrogen modulating activity.

Korean Ginseng

The uses of *Panax ginseng* root in traditional Chinese medicine (TCM) include *tonification* of the *vital energy* and *spleen*, calming the nerves, chronic general weakness with irritability and insomnia and organ prolapse.²⁰ In western herbal medicine, Korean Ginseng is used as an adaptogenic tonic indicated for physical or mental exhaustion and depressive states associated with sexual inadequacy.¹

Clinical trials have reported beneficial results in treating postmenopausal symptoms.²¹ In a controlled trial, Korean Ginseng improved psychological test scores in postmenopausal women with symptoms of fatigue, insomnia and depression, compared to those without symptoms. The improvement was at least partially due to an antistress effect, demonstrated by a decrease in the cortisol/DHEA ratio.²² Korean Ginseng has also demonstrated oestrogen-like activity in women (isolated case reports).³

Randomised, double-blind, controlled trials have shown that Korean Ginseng significantly improves quality of life and well-being in people whilst under stress and increases physical performance.³

Sage

The aerial parts of *Salvia officinalis* are astringent and antihyperhydrotic. Traditionally Sage has been used to restrain excessive sweats and for debility of the nervous system including nervous exhaustion.^{1,14,23} A product containing Sage and Alfalfa extracts improved menopausal symptoms (hot flashes/flushes, night sweating) in an open trial conducted for 3 months.²⁴ Sage reduced sweat production in patients with hyperhidrosis (excessive sweating) in a number of open studies.²⁵

Synergistic Formulation

These herbs would complement each other in a very potent formulation for the treatment of the symptoms of menopause.

Indications

- Menopausal symptoms, especially hot flashes/flushes and night sweating.
- Menopausal neurosis, nervous conditions especially depression and nervous exhaustion.
- Disorders of the female reproductive tract including prolapse, poor libido and leukorrhoea.
- Improving physical and mental performance, well-being and general performance under stress.

Cautions and Contraindications

Contraindicated in pregnancy, in patients taking cyclosporin, digoxin, irinotecan, HIV non-nucleoside reverse transcriptase and other protease inhibitors, anticoagulant drugs and monoamine oxidase inhibitors such as phenelzine.

Best avoided patients with oestrogen-dependent tumours such as breast cancer, until more information is available regarding possible oestrogenic activity.

Caution in patients with pre-existing cholestasis or known photosensitivity; patients taking amitriptyline, photosensitizing agents, selective serotonin reuptake inhibitors, other serotonergic agents, low dose oral contraceptive pill, theophylline, sildenafil, fexofenadine, midazolam and simvastatin.

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