

Feverfew (*Tanacetum parthenium*)

History

- Feverfew is a flowering plant from the daisy family whose leaves have been used medicinally for thousands of years.
- It's name comes from the fact that one of its traditional uses has been as a fever reducer.
- Feverfew became popular in England, France and Canada in the 1980s. Widespread use appeared in the U.S. in the 1990's.

Most studied uses

Migraine prophylaxis.

Other common uses

Osteoarthritis, menstrual irregularity, difficulties in labor, psoriasis, asthma, fever.

Summary of the evidence

- There is some evidence that feverfew may be effective for the prevention of migraines, although the results have been somewhat mixed and the number of trials is small.
- Feverfew is generally safe and well-tolerated.
- Other uses for feverfew have not been well-studied.

Pharmacology

- The most active ingredient is likely parthenolide, which has been shown to have anti-inflammatory effects.
- Other potentially active constituents include flavenoid glycosides and pinenes.

Mechanism of action

The anti-inflammatory effects of parthenolide include the inhibition of arachidonic acid and serotonin and the inhibition of prostaglandin from smooth muscle.

Clinical studies

- A systematic Cochrane review (Pittler 2000) found 4 trials which met inclusion criteria.

- Three of these trials suggested beneficial effects of feverfew compared with placebo, although all 3 had one or more methodological flaws, such as a cross-over trial with an inadequate wash-out period.
- The trial with the highest methodological quality found no significant difference between feverfew and placebo. (de Weerd 1996)

Adverse effects

- No serious adverse effects have been documented in long-term users (up to 10 years).
- One withdrawal study of patients previously taking feverfew suggested that abrupt discontinuation from the herb may result in a "post-feverfew syndrome" which includes rebound headaches, joint pain, anxiety and insomnia.
- Mouth ulcers and lip or tongue swelling may occur in 10-15% of patients who take feverfew, especially if they chew fresh leaves.

Contraindications/cautions

- Use with caution in those planning elective surgery because of its effect in vitro on platelet aggregation
- Should not be used in pregnancy as it may cause miscarriage.

Important drug/herb interactions

- May interact with anticoagulants and cause excessive bleeding.

Formulation and dosage

- The daily dose used in trials has been 50-100 mg of dried leaf preparations, but some herbal authorities have recommended much higher doses.
- Preparations are often standardized to contain 0.2% parthenolide.
- The active ingredients may be better preserved in crushed, dried leaves rather than in alcohol extract preparation.

References

1. Pittler MH, et al. Feverfew for preventing migraine (Cochrane Review). In: The Cochrane Library, 2000. Oxford: Update Software.
2. de Weerd CJ, et al. Herbal medicines in migraine prevention: randomized double-blind placebo-controlled crossover trial of a feverfew preparation. *Phytomedicine* 1996;3:225-30