

Clinical Studies on Feverfew (*Tanacetum parthenium* [L.] Schultz Bip.)

Migraine Prophylaxis

Author/Year	Subject	Design	Duration	Dosage	Preparation	Results/Conclusion
de Weerd et al., 1996	Migraine	R, DB, PC, CO n=44 men and women with migraine at least 1x/month	9 months: 1 placebo capsule/day for 1 month; 4 months feverfew, and 4 months placebo	One, 143 mg capsule/day	Dried alcoholic extract of feverfew leaves providing 0.5 mg of parthenolide per capsule, prepared by investigators	Feverfew did not reduce the number of migraine attacks. However, patients taking feverfew had a tendency to use fewer symptomatic drugs during the period they took feverfew. Note: It is very likely that this extract and/or its method of preparation caused degradation of active constituents.
Palevitch et al., 1997	Migraine	R, DB, CO (there was also an O phase for the first 2 months) n=57 men and women with migraine	4 months (Group A: 3 months feverfew followed by 1 month placebo. Group B: 2 months feverfew followed by 1 month placebo, then an additional 1 month feverfew. No washout periods.)	One, 50 mg capsule 2x/day or placebo (chopped parsley)	50 mg of dried powdered leaves packed in gelatin capsules. 0.2% parthenolide content, prepared by investigators	Feverfew caused a significant ($p<0.01$) reduction in pain intensity ($p<0.001$). There was a significant ($p<0.017-0.001$) reduction in vomiting, nausea, sensitivity to noise, and sensitivity to light.
Anderson et al., 1988	Migraine	O, C, RS n=60 women with history of common or classical migraine for at least 2 years	30 of the patients had been using feverfew daily for at least 11 consecutive months; 30 of the patients were non-users	Varied, patients were self-dosing	This study examined blood and urine, and did not dispense feverfew. Patients self-administered raw feverfew leaves, or dried leaves in capsules or tablets	Prophylactic use of feverfew by migraine sufferers did not result in increases in chromosomal aberrations or sister chromatid exchanges in peripheral lymphocytes, nor did it produce mutagenic urine. The effect of feverfew on migraine was not examined.
Murphy et al., 1988	Migraine	R, DB, PC, CO n=60 men and women with migraine	9 months (1 month single-blind placebo-run-in, 4 months feverfew, 4 months placebo)	70–114 mg capsule/day (mean 82 mg) (amount of powder varied with the strength of the preparation, as judged by its anti-secretory activity) or placebo (dried cabbage)	Dried feverfew leaves in capsules (2.19 mmol parthenolide) prepared by investigators, or placebo	Feverfew was associated with reduced number and severity of attacks. However, the duration of the attacks was unaltered. Feverfew caused a significant reduction in nausea and vomiting ($p<0.02$). No serious side effects were reported.
Johnson et al., 1985	Migraine	R, DB, PC n=17 patients with migraine who had been self-administering raw feverfew leaves daily for at least 3 months	6 months	One, 25 mg capsule 2x/day	Capsules contained 5 freeze-dried feverfew leaflets weighing 25.7 mg, prepared by investigators	Feverfew taken prophylactically reduced the frequency and severity of symptoms of migraine ($p<0.02$), but not the duration of attacks. Feverfew also reduced incidence of nausea/vomiting ($p<0.05$). During months 3–6 the patients taking dried feverfew had the same number of attacks as when they were taking fresh feverfew. In contrast, the patients taking the placebo had a relapse and experienced a significant increase in the frequency and severity of migraines and associated symptoms of nausea and vomiting.

Arthritis

Author/Year	Subject	Design	Duration	Dosage	Preparation	Results/Conclusion
Patrick et al., 1989	Rheumatoid arthritis	R, DB, PC n=41 women with classical or definite rheumatoid arthritis (ages 28–65 years)	6 weeks	70–86 mg/day (mean 76 mg) or placebo (cabbage)	Dry, powdered leaf (equivalent to 2–3 μ mol parthenolide), prepared by investigators	No differences observed between the groups. No apparent benefit from oral feverfew for rheumatoid arthritis.

KEY: C – controlled, CC – case-control, CH – cohort, CI – confidence interval, Cm – comparison, CO – crossover, CS – cross-sectional, DB – double-blind, E – epidemiological, LC – longitudinal cohort, MA – meta-analysis, MC – multi-center, n – number of patients, O – open, OB – observational, OL – open label, OR – odds ratio, P – prospective, PB – patient-blind, PC – placebo-controlled, PG – parallel group, PS – pilot study, R – randomized, RC – reference-controlled, RCS – retrospective cross-sectional, RS – retrospective, S – surveillance, SB – single-blind, SC – single-center, U – uncontrolled, UP – unpublished, VC – vehicle-controlled.