Treatment of symptomatic uterine fibroids with a tea extract: a pilot randomized controlled clinical study (Summary)

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Background: Uterine fibroids (UFs, also known as leiomyoma) affect 70% of reproductive-age women. Imposing a major burden on health-related quality-of-life (HRQL) of premenopausal women, UF is a public health concern. There are no effective medicinal treatment options currently available for women with symptomatic UF.

Objectives: To evaluate the efficacy and safety of green tea extract (epigallocatechin gallate [EGCG]) on UF burden and quality of life in women with symptomatic UF, in a double-blinded, placebo-controlled randomized clinical trial.

Methods: A total of 39 reproductive-age women (age 18–50 years, day 3 serum follicle-stimulating hormone < 10 mIU/mL) with symptomatic UF were recruited for this study. All subjects had at least one fibroid lesion 2 cm^3 or larger, as confirmed by transvaginal ultrasonography. The subjects were randomized to oral daily treatment with either 800 mg of green tea extract (45% EGCG) or placebo (800 mg of brown rice) for 4 months, and UF volumes were measured at the end, also by transvaginal ultrasonography. The fibroid-specific symptom severity and HRQL of these UF patients were scored at each monthly visit, using the symptom severity and quality-of-life questionnaires. Student's *t*-test was used to evaluate statistical significance of treatment effect between the two groups.

Results: Of the final 39 women recruited for the study, 33 were compliant and completed all five visits of the study. **In the placebo group (n = 11), fibroid volume increased (24.3%) over the study period; however, patients randomized to green tea extract (n = 22, 800 mg/day) treatment showed significant reduction (32.6%, *P* = 0.0001) in total UF volume. In addition, EGCG treatment significantly reduced fibroid-specific symptom severity (32.4%, *P* = 0.0001) and induced significant improvement in HRQL (18.53%, *P* = 0.01) compared to the placebo group. Anemia also significantly improved by 0.7 g/dL (*P* = 0.02) in the EGCG treatment group, while average blood loss significantly decreased from 71 mL/month to 45 mL/month (*P* = 0.001). No adverse effects, endometrial hyperplasia, or other endometrial pathology were observed in either group.**

Conclusion: EGCG shows promise as a safe and effective therapeutic agent for women with symptomatic UFs. Such a simple, inexpensive, and orally administered therapy can improve women's health globally.

Complete study results can be forwarded to you by email – send your request to research@butterfysolutions.biz

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