RESEARCH ARTICLE

Mentha longifolia syrup in secondary amenorrhea: a double-blind, placebo-controlled, randomized trials

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Abstract

Background: Amenorrhea is defined as the cessation of menses. Hormonal therapy is the most common treatment. Due to the common indications and side effects of it and increasing demand for alternative medicine solutions, Mehtna longifolia L. is used in this study. M. longifolia L. is a green medication in traditional herbal medicine to reduce menstural bleeding in women with secondary amenorrhea and oligomenorrhea.

Methods: In a double-blind, placebo-controlled, randomized trial, 60 females with secondary amenorrhea and oligomenorrhea were treated with equal groups (30 in each group) for 3 months. Treatment consisted of sequential and single (15 mL) of M. longifolia syrup for 2 weeks. If the patients did not experience menstruation after 2 weeks of taking the medication, the treatment was repeated for two more weeks. If the patients had menstruation at the end of the trial, they were assigned to the second group and continued menstruations. The primary endpoint was 30 days or less of menstruation. The quantity of bleeding was documented by the patient on daily basis. The primary outcome parameter was the percentage of patients who experienced amenorrhea during the first treatment period. The secondary efficiency outcome was the frequency of menstruating during the three cycles of the study.

Results: The number of women with menstruation during the first cycle was higher in the drug group compared to the placebo group (p < 0.001). The majority of women in the drug group (90.3%) reported that the drug was effective in the drug group compared to the placebo group (63.3% and 33.3%, respectively). No notable side effects were reported in relation to M. longifolia L. syrup.

Conclusions: In conclusion, M. longifolia L. syrup is a safe, well-tolerated, and effective choice in reducing secondary amenorrhea and oligomenorrhea.

Keywords: Mentha longifolia, Lactation, Amenorrhea, Oligomenorrhea, Vascular endothelial growth factor, Estrogen, FSH, LH

Introduction

Secondary amenorrhea (SA) is defined as the cessation of menses for 4 or more months. The most common pattern is oligomenorrhea, with regular menstrual flow in intervals of 40 days to 6 months or 6-7 cycles in a year (25). The overall prevalence of secondary amenorrhea is unknown, as prevalence of oligomenorrhea is 12.3% (24). The most common form of secondary amenorrhea is hypogonadism disorders caused by hypothalamic-pituitary-ovarian dysfunction, typically functional hypothalamic amenorrhea (FAA) due to stress associated with anorexia nervosa and body mass index (BMI) reduction (26). Another common form of secondary amenorrhea is oligomenorrhea disorders associated with polycystic ovary syndrome (PCOS) and endometrial atrophy (27). This syndrome affects 20-25% of reproductive-age women (28). The prevalence of endometrial atrophy is 4% and 21% among women with PCOS (29). Amenorrhea occurrence in the first and early reproductive periods is not rare.