

Title: The effect of *Seidlitzia rosmarinus* (*eshnan*) on the prevention of recurrent cystitis in women of reproductive age: A randomized, controlled, clinical trial

Introduction: Developing cystitis twice or more in six months or thrice or more in 12 months is referred to as recurrent cystitis. The WHO has recommended alternative and herbal medicine for the treatment and control of the symptoms of this common disease. The present study was conducted to determine the effect of *Seidlitzia rosmarinus* (*eshnan*) on the prevention of recurrent cystitis in women of reproductive age.

Methods: The present triple-blind clinical trial was conducted on 126 women (63 women per group) aged 15 to 49 years with recurrent cystitis referring to any of the health centers in Parsabad, Iran, between October 2017 and November 2018. The participants were assigned to the intervention (*Seidlitzia rosmarinus*) and control groups using block randomization. Three 500-mg *eshnan* or placebo tablets were taken orally with a glass full of water by the participants half an hour after each meal (breakfast, lunch and dinner) every day for two months. The study subjects were clinically (examination of clinical symptoms) and para-clinically (urine culture) evaluated by the end of the second, fourth and sixth months after the intervention and every time they showed clinical symptoms of cystitis.

Results: The present findings showed that the incidence rate of cystitis was significantly lower in the intervention (*eshnan*) group compared to the control (placebo) group 2, 4 and 6 months after the intervention ($P < 0.001$). The incidence of recurrent cystitis (twice or more urinary tract infections in six months) was also significantly lower in the intervention group compared to the control group ($P < 0.001$). Two months after the intervention, the incidence of symptoms of urinary frequency and dysuria was significantly lower in the intervention group compared to the control group ($P < 0.05$). Four months after the intervention, the incidence of symptoms of urinary frequency and pain in the suprapubic area was significantly lower in the intervention group compared to the control group ($P < 0.05$). Six months after the intervention, the incidence of symptoms of urinary frequency, oliguria and dysuria was significantly lower in the intervention group compared to the control group ($P < 0.05$). No side-effects were observed in either the intervention or control groups in the present study.

Conclusion: The consumption of *eshnan* can improve the symptoms of cystitis and prevent the incidence of recurrent cystitis in women of reproductive age.