

Abstract

Background and objectives: Hemorrhoids are a prevalent disease that affects health and well-being. Its treatment is generally based on improving the symptoms. According to sources, *Achillea millefolium* (Yarrow) has long been used to treat various diseases including hemorrhoids due to its various chemical compounds. But there is not enough scientific evidence. So, the present research was performed to assess the effect of hydroalcoholic extract of *Achillea millefolium* as ointment on the symptoms of hemorrhoids.

Methods: This double-blind clinical trial was performed on 54 patients with grade 1 and 2 internal hemorrhoids referred to the Kowsar Clinic of Ardabil in 1399. After extracting and concentrating the hydroalcoholic extract of *A. millefolium*, 5% ointment of the extract was formulated. Enrolled patients were randomly allocated into two groups of extract ointment and placebo ointment. They received the ointment three times a day for ten days. Recommendations for lifestyle modification and laxative administration were given to all patients. Symptoms (pain, discomfort during defecation, bleeding intensity, bleeding frequency, and itching) were assessed at the beginning of treatment and after ten days. The checklist was completed based on the patient's history. The data were analyzed by T-test and Chi-square.

Results: The mean score of pain and discomfort during defecation after treatment in *A. millefolium* extract group was significantly lower than the placebo group ($p < 0.05$). Also, there was a significant difference between groups in terms of severity and frequency of bleeding and these symptoms were lower in *A. millefolium* group ($p < 0.05$). There was no significant difference in term of itching between two groups ($p = 0.069$).

Conclusions: According to the results, the ointment containing of 5% hydroalcoholic *A. millefolium* extract reduces most of the symptoms of grade 1 and 2 internal hemorrhoids, so it can be evaluated in further studies as a candidate for the production of a new drug.

Keywords: Hemorrhoids, *A. millefolium*, total phenol, hydroalcoholic extract, Clinical trial