



Evaluation of the effectiveness of a standardized decoction of *Peganum harmala* seeds on the treatment of head lice in children: A randomized clinical trial

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Abstract

Background and Purpose: Head lice is a parasitic disease that infects many children in the world every year. In Iranian traditional medicine references, *Peganum harmala* has been introduced as an anti-lice treatment, also effective on nits. This study investigated the effectiveness of the decoction of *Peganum harmala* seeds in the treatment of head louse.

Materials and Methods: Sixty eligible patients with head lice infestation were randomly assigned to receive either the 1% permethrin shampoo (an initial application followed by a second application seven days later) or a decoction of *Peganum harmala* seeds (instructed to apply to dry hair, leave on for 40 minutes then rinse; repeat in seven days). Assessments were made by dry detection combing on days 2, 8, and 15 after the first treatment. The number of adult lice and eggs were recorded and used to determine the effectiveness of the treatments via statistical analysis.

Results: The effectiveness of permethrin and *Peganum harmala* was not significantly different among groups on days 2 and 15 of treatment ($p=0.282$ and $p=0.077$, respectively). However, permethrin shampoo was significantly more effective than *Peganum harmala* decoction on day 8 of treatment ($p=0.04$). No significant difference in eradication rate of head lice was observed between the two groups at the end of study ($p=0.077$).

Conclusion: Based on our findings, the effectiveness of permethrin and *Peganum harmala* was not significantly different in treatment of head lice in children. However, further clinical studies are needed to clarify the effectiveness of *Peganum harmala* in the treatment of head lice.

Keywords: Lice infestations, Child, Peganum, Herbal teas, Persian Medicin

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