Study on Efficacy of 1% Permethrin Shampoo and Some Traditional Physical Treatment for Head Lice Infestation

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Abstract:

Background: There is an increase in the prevalence of head lice among urban communities with high density in recent years. This study was aimed to determine the efficacy of 1% permethrin shampoo and some traditional physical treatment for head lice infestation in Qom Province, central Iran.

Methods:This analytical cross-sectional study was carried out on all 11,223 cases in six categories that were referred to Qom health care system from 2016 to March of 2017. The infested people were treated with 1% permethrin shampoo, twice at a 1-week interval and other recommended therapeutic categories, such as the use of physical treatments such as wooden fine-toothed combs impregnated with a mixture of water and white vinegar on infested hair for 30 min and secondly, carrier oils such as olive oil, bitter almond on infested hair over a therapeutic period. After completing the course of treatment, treatment success was checked by questionnaires.

Results: A total of 11,223 cases with head lice infestation were confirmed and were enrolled for study. Out of six categories, three therapeutic categories were utilized as follows: (a) 1% permethrin shampoo and the use of physical treatments; (b) 1% permethrin shampoo and the use of carrier oils; (c) the above-mentioned therapeutic categories combined had high treatment success. It was estimated to be 82.00%, 87.31%, and 94.33%, respectively.

Conclusions: According to the findings, in addition to the application of 1% permethrin shampoo, the use of physical treatments and carrier oils such as olive oil, bitter almond can increase the treatment success of head lice infestation.

Keywords: Head lice, pediculus humanus capitis, permethrin