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Letter to Editor

Healing Effect of *Perovskia Abrotanoides* Karel and Expression of VEGF and TGF-B Genes in Burn Injury of Rats

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Dear Editor

With great interest, I reviewed the original article on healing effect of *Perovskia abrotanoides* Karel in burn injuries (IJNS 2019;4(4):175-180) (1). The authors have shown that *P. abrotanoides* ointment can accelerate wound healing by producing VEGF (1). First, I believe that the authors should have followed the study for at least two weeks to reach such a conclusion as most histological studies undertake the tissue sampling for 2 or 3 weeks (2, 3), and one week is not a proper time to judge and reach the mentioned findings. Second, the study lacks histological pictures to confirm a correlation between the expression of genes and the healing process. The authors have not clarified the depth of burn, because the histological assessments were not presented to document the extent of tissue injury.

Third, the method of burn induction by pouring 2.5 mL of boiling water (95ºC) into a firm rubber ring (2 cm diameter) on the dorsal surface of skin for 10 seconds cannot be extended for all types of burns that has been written in the conclusion section. Forth, among the three groups of *P. abrotanoides*, vehicle, and silver sulfadiazine, there are no data available about the ingredients of the vehicle that may have a central role in tissue healing. Fifth, information about the laboratory that documented the genus and species of *P. abrotanoides* was not presented. Sixth and the last, the authors have just used VEGF and TGF-B genes, which are not enough for investigation of repair in burn injuries. Adding Bax, Bcl-2, FGF or other genes can be beneficial and helpful (4). Therefore, the findings of this article cannot be valid to reach their conclusion for efficacy of *P. abrotanoides* in burn wound healing.

Conflict of Interest

None declared.

References

1 Derakhshanfar A, Mehrabani D, Moayedi J, et al. Healing effect of Perovskia abrotanoides karel and expression of VEGF and TGF-B genes in burn injury of rats. *Int J Nutr Sci.* 2019;4:175-180. DOI: 10.30476/ijns.2019.83490.1035.

2 Nasiri E, Hosseinimehr SJ, Azadbakht M, et al. The healing effect of arnebia euchroma ointment versus silver sulfadiazine on burn

wounds in rat. *World J Plast Surg.* 2015;4:134-144. PMID:26284182.

3 Vaghardoost R, Mousavi Majd SGR, Tebyanian H, et al. The healing effect of sesame oil, camphor and honey on second degree burn wounds in rat. *World J Plast Surg.* 2018;7:67-71. PMID:29651394.

4 Spies M, Dasu MR, Svrakic N, et al. Gene expression analysis in burn wounds of rats. *Am J Physiol Regul Integr Comp Physiol.* 2002;283:R918-30. DOI:10.1152/ajpregu.00170.2002. PMID:12228062.