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Letter to the Editor

Does *Hypericum* Perforatum Have Inflammatory or Anti-Inflammatory Effects?

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Dear Editor,

The extract of the herb Hypericum perforatum (HP) is commonly used for wound healing [1]. Its antioxidant, anti-inflammatory, antiviral, and antibacterial efficacies have been demonstrated in previous studies [1]. Active ingredients, such as hypericin and hyperforin, inhibit the production of the proinflammatory mediators, such as IL-10, TNF-α, and PGE2, and produce antioxidant and anti-inflammatory effects [2]. In a study by Yaşar et al. [3] that was recently published in your journal, the role of HP in the healing of perforated tympanic membranes (TMs) was investigated, and it was found that leukocyte count, neovascularization, and fibroblast proliferation were statistically significantly high in the group in which HP was used with olive oil solution and that fibrotic activity and collagen production increased wound healing at the perforation site. They reported that an increase in leukocyte counts enables matrix metalloproteinases to promote re-epithelization and remodeling and that an increase in fibroblasts promotes collagen synthesis and wound healing. They also indicated that their study on the potential curative role of HP in the healing of TM perforation was the first in the literature [3]. However, in the study by Eğilmez et al. [4] published in July 2015, the effect of HP on myringosclerosis and the healing of TM perforations in all animals was evaluated, and it was also found that the rate of myringosclerosis in the lamina proprias of TMs is lower because of the high anti-inflammatory activity of HP. In the study by Eğilmez et al. [4] a group of animals fed with oral gavage was obtained because of the high systemic absorption of the oily solution of HP from the gastrointestinal tract. It was shown that the systemic effect of the oily solution of HP is similar to that of its topical form. However, only the topical form of HP was used in the study by Yaşar et al. [3], in which the number of leucocyte, neovascularization, and fibroblasts, which are the findings of acute inflammation, was higher than that in previous studies in which anti-inflammatory effects of HP were shown [3].

In conclusion, we believe that further studies including both topical and oral forms of HP are required to demonstrate which form provides more prominent inflammatory or anti-inflammatory effects on TM healing.

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