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High zinc content of ankaferd hemostat and wound healing effect

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To the Editor,

We read with great interest the articles entitled “An evaluation of the effects of caffeic acid phenethyl ester and Ankaferd blood stopper on secondary wound healing of oral mucosal tissue”, and “Antiinfective and wound-healing pleiotropic actions of Ankaferd hemostat” published recently in the Turkish Journal of Medical Sciences [1,2].

It is indicated that Ankaferd Hemostat (Ankaferd Blood Stopper, ABS) has effects on oral wound healing and also, has antibacterial, antiinfective, and cellular features [1,2]. The wound healing process consists of four highly connected and overlapping processes: hemostasis, inflammation, proliferation, and tissue remodeling [3].

Zinc is an essential trace element in the human body and has an importance in both health and diseases. Zinc takes role in the cellular environment as part of metalloenzymes and is involved in the stimulation of multiple enzyme pathways and it is required for collagen synthesis throughout the proliferation and maturation phases. It is also necessary for the proliferation of fibroblasts and keratinocytes for re-epithelialization and strengthening the wound [4,6].

One of our studies leads to new investigations about the contents of ABS showing its high iron content that can

play a significant role in the ABS-induced cellular hemostasis located in the crossroads of RBC–fibrinogen interactions [6]. Çiftçiler et al. detailed the wound healing properties of ABS in their review article and declared that current perspective for using ABS should be accelerating wound healing and providing hemostasis [7]. In our study, we aim to search the concentration of zinc in ABS and to show if its effect could shed light on wound healing. The zinc concentration in ABS was measured by Cobas 501 (Roche Diagnostics, Germany) using the commercial kit Randox Zinc Assay (Randox Laboratories Ltd., UK) and was found 300 µg/dL that can be taken as high value.

This result may indicate that high content of zinc in ABS may help its wound healing effect. However, further basic, experimental, and clinical trials about ABS may help us shed light on ABS’ clinical effects on wound healing.

Conflict of interest

The authors declare that there is no conflict of interest.

Financial disclosure

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Informed consent

None.

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