Published online 2023 January 3.

Letter



Modified Hypodermic Needle for Injection into the Concha and Fossa of the Pinna

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Received 2022 July 30; Accepted 2022 December 18.

Keywords: Bent, Controlled Depth, Curettage, Excise, Discoid Lupus Erythematosus, Intralesional, Injection, Local Anaesthesia, Needle Shaft, Safe, Vitiligo, Psoriasis

Dear Editor,

Several benign lesions, such as seborrheic keratosis, cutaneous horn, fibrokeratoma, and melanocytic nevus, used to occur on the concave surfaces of the pinna (concha, cymba, and fossa) (1). These lesions have to be curettage or excised under local anesthesia. For anesthetizing the lesions, we often use a straight 26G needle, whose straight shaft cannot reach the site with proper alignment with the surface of the concha and cymba of the ear. We often face difficulty in anesthetizing the lesions, and there is a high incidence of prick injury to the pinna cartilage. Here, the authors have described a customized hypodermic needle for safe intralesional injection on the concave surfaces of the pinna.

For safe and easy intralesional injection on the concha and fossa, there should be an alignment of the needle shaft with the surface to depot the drug at a controlled depth without injury to the cartilage of the external ear. To solve these problems, the needle shaft is bent at least 2 to 3 mm proximal to the beveled end of the needle by 60 to 70 degrees with the needle holder. During the needle shaft bending, the needle's bevel surface is kept facing upward. Then the bent needle has better alignment with the surface of the concha and cymba of the external ear than the original needle (Figure 1A - F). Thus, with the modified needle, it is easy to perform the intralesional injection, and injury to the cartilage can be avoided. This bent needle can be used for intralesional therapy for nonresponsive vitiligo, discoid lupus erythematosus, and psoriatic patch in the concha and cymba of the ear.

Footnotes

Authors' Contribution: All works related to this article were done by both authors.

Conflict of Interests: There is no conflict of interest in declaring data

Funding/Support: Authors declared that they haven't received any funding/support.

Informed Consent: Informed consent has been obtained from all participants.

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Figure 1. Comparison of alignment of the needle shaft with surfaces of concha and cymba-pre-modification (A-C) and post-modification of the needle shaft (D-F).