



ACNE, ROSACEA, AND RELATED DISORDERS (INCLUDING HIDRADENITIS SUPPURATIVA)

## **SIMPLE AND SAFE TECHNIQUES FOR EXTRACTING COMEDONES BY CARBON DIOXIDE LASER-ASSISTED PINHOLE METHOD COMBINED WITH A HOOK-SHAPED 30-GUAGE SYRINGE NEEDLE**

*Sang Ju Lee<sup>(1)</sup> - Tae-gyun Kim<sup>(2)</sup> - Seong Gyu Yang<sup>(3)</sup>*

*Yonsei Star Skin & Laser Clinic, Dermatology, Seoul, Republic Of Korea<sup>(1)</sup> - Department Of Dermatology, Severance Hospital, Cutaneous Biology Research Institute, Yonsei University College Of Medicine, Seoul, Republic Of Korea<sup>(2)</sup> - Choil Skin Clinic, Dermatology, Seoul, Republic Of Korea<sup>(3)</sup>*

Background: Acne is one of common inflammatory skin disorders driven by abnormal sebum retention and keratinization of the hair follicle. Comedones are initial lesions of the spectrum of acne vulgaris which can be classified into closed (white) and open (black) types. To prevent the development of overt inflammatory acne lesions, it is important to thoroughly extract comedones with no accompanying inflammation and scars. In general, extraction of closed comedone is quite challenging due to (1) the lack of surface opening and (2) its location within the deep part of the skin.

Observation: To overcome two hurdles of comedonal extraction, we demonstrated the usefulness of carbon dioxide (CO<sub>2</sub>) laser-assisted pinhole method combined with physical extraction of comedone by a hook-shaped 30-guage syringe needle. First, narrow area of skin surface of closed comedone was subjected to a quick CO<sub>2</sub> laser irradiation to make a 1-2-mm-sized pinhole which facilitated a direct approach to the underlying comedone from outside. Next, a tip of 30-guage syringe needle was simply tapped on the surface of sterile steel bowl to make a hook-shaped needle tip. Finally, a hook-shaped needle was inserted through the pre-made pinhole and entire comedone was easily extracted by gentle physical removal. There were no significant side effects such as scarring and hyperpigmentation.

Key message: Compared to the traditional squeezing extraction technique using two cotton swabs, our novel method provides an easy and safe way to extract closed comedones with a great cosmetic outcome.

