# Innovative Use of a Comedone Extractor as an Anesthetic Tool for Intradermal Injections on Scalp

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# **PROBLEM FACED**

Intradermal injections in the scalp are often painful, and it is a challenge to obliviate the pain factor. Various methods of anesthesia for the scalp have been used, such as regional nerve blocks, infiltration anesthesia, and topical anesthetic creams. Each of these methods has its inherent drawbacks. Regional blocks and infiltration anesthesia need a certain level of skill to perform and topical anesthetic creams are messy, take a long time to act on the scalp, and are often ineffective.<sup>[1]</sup> Cooling and vibration are other methods, which have a limited efficacy and need additional devices.

## **SOLUTION PROPOSED**

We used a sterile comedone extractor [Figure 1A], which is a simple and readily available instrument in dermatology

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**Figure 1:** (A) A commonly available comedone extractor with loops at both the ends. The wider loop provides a better opportunity for injection. (B) A comedone extractor pressed against the scalp surface provides pressure anesthesia and hemostasis. Platelet-rich plasma (PRP) is injected through the loop with an insulin syringe (32G needle) while maintaining the pressure at comedone extractor

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clinics, as a device to alleviate pain during scalp injections. The instrument was pressed on the scalp, and injections with an insulin syringe with a 30-32G needle were administered through the head (loop) of the extractor [Figure 1B, Video 1]. This provided a dual benefit of significant anesthesia via the pain gate theory,<sup>[2]</sup> as well as hemostasis. According to the pain gate theory, pain perception is reduced by the perception of pressure by the instrument. The rim of the loop provides hemostasis, pressure anesthesia, and a window for injections. The familiarity with the instrument and ease of use are added advantages. This technique provides a neat and effective method of inducing anesthesia for scalp injections.

### **Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/ have

given his/ her/ their consent for his/ her/ their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

#### **Conflicts of interest**

There are no conflicts of interest.

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