

Intralesional injection in keloid using lumbar puncture needle

Problem

Injecting into keloids and hypertrophic scars is difficult as it requires a greater amount of force and manipulation to negotiate the thin hypodermic needle through these areas. Conventional hollow hypodermic needles increase the chances of deviation, bending and breakage during

the process of multiple reinsertions as done in the fanning technique.¹ This often requires the use of thick bore stronger needles, making the process more painful.² Anaesthetizing large keloids followed by intralesional injection of medications need multiple punctures. This can be stressful and upsetting for both patient and clinician alike.

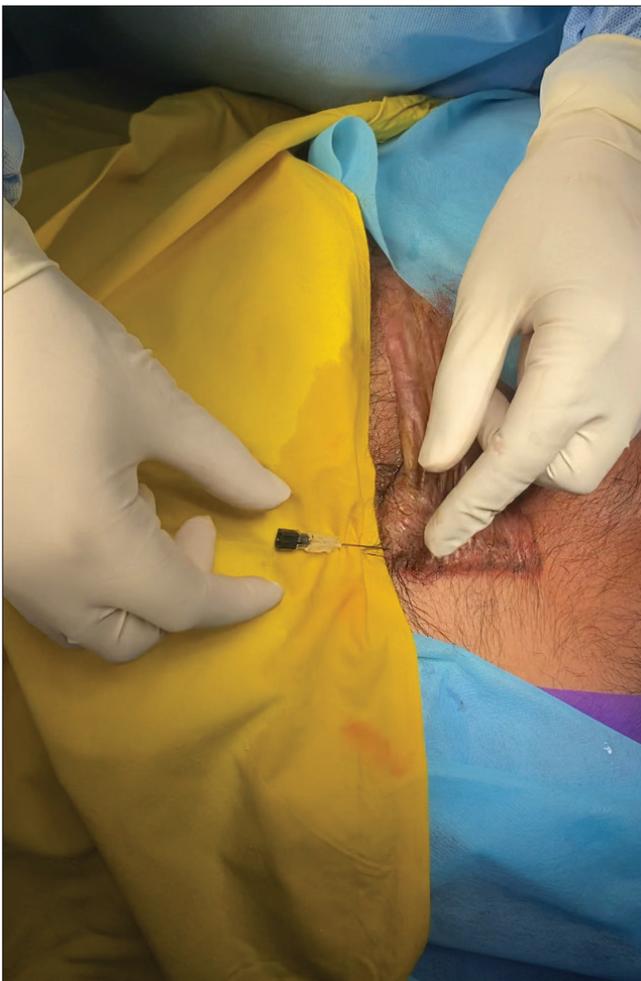


Figure 1: Insertion of a thin lumbar puncture needle in the keloid with stylet in place to mimic a solid needle. Note the point of insertion is within the keloid itself

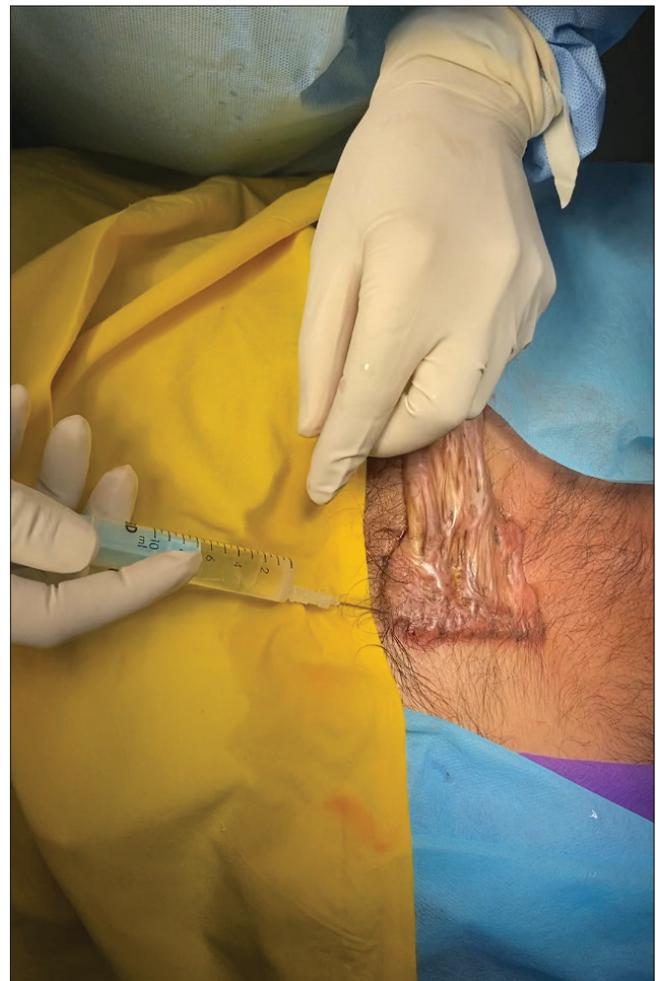


Figure 2: Attachment of a syringe containing local anaesthetic to the hub of the lumbar puncture needle after removing its stylet

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Solution

To circumvent these problems, we propose the use of a thinner lumbar puncture (LP) needle with a stylet. Initially, the lumbar puncture needle is inserted with the entry point within the keloidal tissue [Figure 1]. Such insertion through the keloid does not cause microtrauma to normal skin, thus preventing further keloid formation. The stylet gives strength to the thin needle and mimics a solid needle during the process of insertion. The stylet is removed and a syringe containing the anaesthetic solution or intralesional injections, such as triamcinolone acetonide mixed with lidocaine, is attached to the hub of the lumbar puncture needle and the lesion is infiltrated as the needle is withdrawn [Figure 2]. Once the needle is about to reach the skin surface, the syringe is removed and the stylet is placed back to reintroduce it through the tough tissues in a different direction [Video 1]. This process is repeated to cover the entire keloid. The LP needle along with its stylet is more rigid, thus offering resistance to needle breakage, bending and deflection.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Nil.

Conflict of interest

There are no conflicts of interest.

Video 1. Video demonstrating the technique of using lumbar puncture needle for intralesional injection in a keloid

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References

1. Acham S, Truschneegg A, Rugani P, Kimbauer B, Reinbacher KE, Zemann W, *et al.* Needle fracture as a complication of dental local anesthesia: Recommendations for prevention and a comprehensive treatment algorithm based on literature from the past four decades. *Clin Oral Investig* 2019;23:1109–19.
2. Usanakornkul A, Burusapat C. A topical anesthetic and lidocaine mixture for pain relief during keloid treatment: A double-blind, randomized controlled trial. *Dermatol Surg* 2017;43:66–73.