Painless steroid injections for hypertrophic scars and keloids

Sir, We read with interest the letter by Azad and Sacks[1] regarding the use of local anaesthesia prior to intra-lesional steroid injection for hypertrophic scars and keloids. We commend the authors for attempting to reduce the pain inflicted during an often-distressing procedure. In our unit, we have taken a different approach, which we recommend as it is quick, safe, cost-effective, and avoids additional injections.

Hypertrophic and keloid scars are managed in our nurse-led Scar Clinic. Prior to attending for injections we recommend that our patients take an appropriate dose of oral analgesia (e.g. paracetamol or ibuprofen). Our technique involves cooling the skin using frozen 25 ml saline sachets (Sterets Normasol™, Seton Prebbles Ltd, UK). Once a scar has been assessed and deemed suitable for intra-lesional steroid injection, the frozen sachet, wrapped in a single layer of moistened gauze is applied directly to the area to be injected and held in place by the patient for 10-15 min. The moistened gauze helps to avoid thermal injury whilst slowing the cooling process. The intra-lesional steroid injection is then administered immediately following removal of the ice pack.

The use of cutaneous cooling for pain relief (cryoanalgesia) has a long history. The first recorded use in surgery was by Barron Larry, Napoleon's surgeon, who amputated frozen limbs in the Battle of Eylau in Poland in 1807. More recently, Howie in 1971 used ice packs to cool the skin prior to harvesting split skin grafts.[2] Ethyl chloride spray has been used to reduce the pain of venepuncture,[3] but in our experience patients did not tolerate this, possibly due to the rapid temperature change. Apart from some mild erythema, we have experienced no side effects of our technique.

The use of a combination of topical and injected anaesthetics is undoubtedly effective, however, each administration costs approximately £3.10p,[4] and requires at least 45 min to have full effect. We recommend our technique which is essentially without additional cost (the saline sachet is still useable), is more rapid and well tolerated by patients. A trial is currently underway examining the effectiveness of cryoanalgesia prior to the administration of injections.

References

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