

Mesotherapy-Induced Urticaria

Letter to the Editor:

Mesotherapy is an unlicensed technique involving the injection of small quantities of various substances into the dermis and subcutaneous tissue to promote healing or corrective treatment to a specific area of the body.¹

Mesotherapy has been used for decades in Europe for the treatment of numerous cosmetic diseases, including cosmetic fat dissolution, but patients may experience various local or systemic adverse reactions to mesotherapy. These are commonly of allergic origin attributed to any of the compounds that are injected, and although they are well known and expected, there is only one relevant case report in literature.² We present a case of mesotherapy-induced urticaria.

A 44-year-old woman with a history of acute urticaria episodes and nimesulide-induced fixed drug eruption decided to undergo mesotherapy treatment with phosphatidylcholine preparation for her localized fat deposits. The preparation also contained lipoic acid, vitamin B3, and N-acetylcysteine.

Based upon her history, an intradermal test with 0.01 mL of the solution was performed in two

different spots of her left arm before the treatment. Within 15 minutes, numerous pruritic wheals appeared, affecting almost the entire arm (Figure 1A and B). Oral cetirizine 10 mg was immediately administered, and betamethasone plasters (Betatape, Faran, Athens, Greece) were applied. The rash subsided after 30 minutes, and no recurrence was reported. The mesotherapy treatment was not performed after the positive intradermal test.

Localized fat deposits are a cause of distress and frustration in many patients. Fearful of the cost and complication of surgical procedures, patients seek less invasive methods, and mesotherapy is rapidly gaining popularity.^{1,3}

Mesotherapy with phosphatidylcholine and other cocktails has been used to treat localized fat deposits,³ but its scientific basis has not been established, the mechanism of action is obscure, and there have been no well-controlled studies to prove its efficacy. Thus in 2003, the Brazilian government banned the use of phosphatidylcholine in mesotherapy injections for cosmetic fat reduction because of safety concerns and the lack of efficacy.⁴

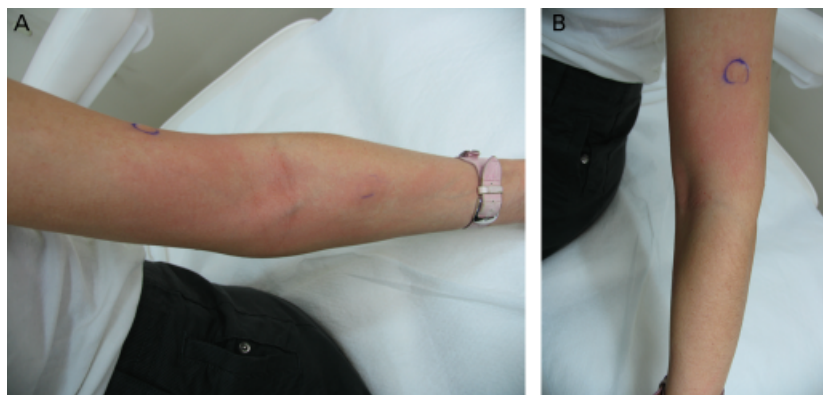


Figure 1. (A and B) After the intradermal test with 0.01 mL of the mesotherapy preparation, numerous pruritic wheals appeared on the patient's left arm.

A number of infectious and noninfectious mesotherapy complications have been described, but injection-site infections with nontuberculous mycobacteria have been emphasized lately.^{4,5} In our case, it was not possible to determine the incriminating substance from among the substances used in the mesotherapy preparation, but phosphatidylcholine itself has been reported to play a role in histamine release.⁶

To minimize the risk of adverse reactions induced by mesotherapy, a medical history is required before treatment. Physicians should also inform patients about this procedure, follow safe injection practices with appropriate aseptic techniques, and use products that prepared following guidelines to ensure sterility.⁵ Clinicians should recognize adverse reactions to mesotherapy and administer appropriate treatment.

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Anesthesia for Ingrowing Toenail Surgery

Letter to the Editor:

Toe necrosis is a rare but serious complication of ingrowing toenail surgery. Ischemia is generally due to digital artery compression or injury. Local anesthesia of the great toe should be performed cautiously to avoid vascular complications. This essential point was not discussed in the report of Rueff and Gapany.¹

Digital block is more dangerous than metatarsal block (Figure 1). Collateral circulation of the toes is minimal, and subcutaneous tissue has only limited expansion capacity. Necrosis may therefore result from direct injuries of digital arteries with the needle or from vascular compression if excessive volume of anesthetic is infiltrated.

Metatarsal block is safer. The anesthetic is injected at the level of the metatarsophalangeal joint or a little more proximally. Vascular injuries or compression of digital arteries is less likely and less serious. In the metatarsal area, collateral circulation is well developed, and the subcutaneous tissue is more expandable.

To reduce the risk of compression, it is also preferable to infiltrate a 2% lidocaine solution instead of a 1% solution because the volume injected is smaller. For many specialists of nail surgery, the infiltration of an excessive volume of anesthetic is more dangerous than the use of an anesthetic with epinephrine. The addition of epinephrine may reduce the need for a tourniquet and produce better and longer pain control during surgery.²