Mesotherapy: valuable, versatile treatment option.(Cosmetic Dermatology)

Atlanta -- Mesotherapy, a technique in which a mixture of medications is injected directly into the mesoderm of the area to be treated, has been used in Europe for decades. Since its introduction in the United States about five years ago, a significant number of U.S. dermatologists have found mesotherapy to be a viable, valuable procedure for treating a variety of conditions.

One such dermatologist is Neil Sadick, M.D., who has a private practice in New York and is clinical professor of dermatology at Cornell University's Weill Medical College in New York City. He discussed his views of the technique in "The Pros of Mesotherapy," a presentation at the annual meeting of the American Society for Dermatologic Surgery, here.

One of the "pros" of mesotherapy--its versatility--is illustrated by the fact that Dr. Sadick divided his presentation into three areas of treatment: skin rejuvenation, cellulite reduction and treatment of fat deposits.

Skin rejuvenation

"I've found that mesotherapy is quite effective in the rejuvenation of facial and neck skin," Dr. Sadick says. "Injections are made into the subdermis; treatments are typically five to 10 minutes; and there is minimal pain and downtime."

For the mesotherapy "cocktail" used for skin rejuvenation Dr. Sadick suggests vitamins, minerals, amino acids, antioxidants and non-cross-linked hyaluronic acids.

"My suggested protocol is to prepare the mesotherapy solution just prior to use," Dr. Sadick explains. "The patient can be seated or lying down, and topical anesthetic may be used if desired."

"There may be mild edema for 12 to 24 hours following treatment," he says. "I suggest treatments at two-week intervals, and three to six treatments are usually sufficient to provide good results."

Reducing cellulite

Mesotherapy for reducing cellulite requires a three-pronged approach, according to Dr. Sadick.

"In cellulite-reduction treatments, the mesotherapy mixture combines agents for local lipolysis, dissolution of connective tissue and enhancement of circulation, again in a series of injections into the subdermis," he says.

Typically, Dr. Sadick employs lipolytic agents such as isoproterenol, forskolin, methylxanthines, carnitine and thyroxine. Collagenase and hyaluronidase are included to break down connective tissue. Lastly, pentoxifylline, coumarin, gingko biloba, melilot and artichoke extract improve regional circulation.

"Treatment protocol for cellulite treatment with mesotherapy is much the same as for skin rejuvenation," Dr. Sadick tells Dermatology Times. "The mesotherapy solution is prepared just prior
to use; the patient should be lying down; and topical anesthesia may be used. Again, mild edema may occur within 12 to 24 hours following treatment.

"Mesotherapy for cellulite should occur at four-week intervals," he says, "and, like the treatments for skin rejuvenation, a total of three to six treatments usually brings excellent results."

Treating fat deposits

Mesotherapy also can be used effectively for treatment of localized fat deposits anywhere on the body, Dr. Sadick says.

"The lipolytic agent used for this application of mesotherapy is phosphatidylcholine, or PDC," Dr. Sadick says. "The protocol is 250 mg of PDC injected into the affected area, with the patient either seated or lying down. Temporary swelling may occur within 48 hours after treatment. I suggest treatment intervals of 15 days, with a total of three to six treatments."

Dr. Sadick notes that controversies surround mesotherapy, such as the lack of standardized solutions, its unsettled status with the Food and Drug Administration, the as-yet-unproven histologic effects, and concerns about longevity, efficacy and need for maintenance.

"Histologic effects of mesotherapy on skin cells and adipocytes will help define its mechanism of action. Longevity and efficacy need to be further evaluated, as does its synergistic effect when used with other treatment modalities," he says. "Once these are resolved, and given that mesotherapy is versatile, requires little downtime and can be applied with minimal pain to the patient, it's my belief that mesotherapy will be more widely accepted as a viable treatment option."

Quick read

Mesotherapy, an often-controversial treatment in which various substances are injected subdermally to treat fat deposits, rejuvenate skin and reduce cellulite, is not without its supporters in the dermatologic community. Neil Sadick, M.D., says mesotherapy can be used effectively for a range of treatments, and though it still needs to be evaluated further, mesotherapy's versatility, minimal downtime requirements and virtually pain-free application are reasons for him to be optimistic about its eventual acceptance as a viable treatment option.

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