



Shot in the Dark?

Mesotherapy May Melt Away Fat, But Some Question Whether It's Safe



Aug. 8 — If you're on a quest for the body beautiful, you've got a staggering variety of pills, potions and surgeries to help you shed inches or erase cellulite if exercise, diet or your genes fail you. And now there's a new and increasingly popular weapon in the anti-fat arsenal.

A growing number of people are deciding to have doctors inject them with a cocktail of drugs, vitamins and supplements to help them shed fat. (ABCNEWS.com)

STORY HIGHLIGHTS

What Is Mesotherapy?

A growing number of people are deciding to have doctors inject them with a cocktail of drugs, vitamins and supplements in hopes of reshaping their bodies.

It's a procedure called mesotherapy, and it involves undergoing hundreds of injections, once a week, for several weeks. The drugs are injected into the mesodermal — or middle — layer of the skin.

The technique was pioneered in France by Dr. Michel Pistor, and has been performed there since 1952. But it's just begun to attract practitioners and clients in the United States in the past few years.

Dr. Lionel Bissoon, who learned the technique in France five years ago, has become America's leading expert and advocate of mesotherapy.

Bissoon says mesotherapy — over the course of 10 sessions — blocks our ability to store fat and stimulates our ability to burn it up. He says a physician can target specific areas of fat by injecting a blend of medications commonly used for asthma and high blood pressure along with vitamins and supplements directly into a specific area of the body.

A single session can cost as much as \$500, so a full course of treatment is a substantial investment. But it seems to be catching on. Bissoon, who has practices in New York, Florida and California, says his clients range from celebrities and CEOs to secretaries.

Bissoon claims the fat winds up in the muscle, where it's used for energy. It does sound too good to be true, especially since Bissoon says he refuses to take patients who won't exercise or follow a healthy diet.

But his patients seem to be happy with the results. Bissoon's most famous client is Roberta Flack. The superstar crooner had a long battle with weight and thought that her extra pounds were indeed killing her softly.

"When you're young and you're overweight, it's just there. After you pass a certain point in your life, well, gravity takes over. And you have a fat stomach that has rolls on top of rolls on top of rolls. And you can't breathe with that," Flack said.

Since starting mesotherapy last year — along with exercise and changing her diet — Flack has lost more than 40 pounds.

Two Patients' Progress

20/20 followed two of Bissoon's patients for weeks to see how mesotherapy worked for them.

One patient, Josselyne Herman-Saccio, is a 35-year-old mother of two who has a full-time job. She looks fit now, but, she says she used to look much better before she had kids. Now, she says, she can't find time to work out. To see the effect of the mesotherapy alone, *20/20* asked Herman-Saccio not to exercise or change her diet.

The other patient *20/20* followed is Katie Noonan-Ewald, a 32-year-old business executive. Noonan-Ewald says she exercises regularly, but had hit a plateau and was unable to get the results she wanted. Every week she flies from her home in Detroit to New York, where she gets her mesotherapy injections.

After six weeks, we checked in with Herman-Saccio — who changed neither her eating nor her exercise habits. She was very happy with the results.

"I've lost over four and a half inches in my waist," she said, "three or four inches in my hips ... I'm wearing clothes that I haven't worn in four years."

Noonan-Ewald's results were even more dramatic. We visited her after she had undergone 12 weeks of mesotherapy. She had

lost 14 inches from her waist, and another 12 inches from her hips, legs, and saddlebag area, according to Bissoon's records.

Is It Safe?

While Bissoon's patients are thrilled with the results of their therapy, some physicians have voiced some serious concerns about the procedure.

Dr. Lisa Donofrio, a dermatologist who teaches at Yale University and practices cosmetic surgery with a specialty in liposuction, has been monitoring reports about mesotherapy and says she worries about its possible long-term effects.

"The problem with mesotherapy," she said, "is that it's a cocktail. The ingredients change on a whim all the time."

While Bissoon says all of the drugs he injects have been approved by the Food and Drug Administration, *20/20* discovered one that hasn't been.

In fact, that ingredient, phosphatidylcholine, is usually consumed as a dietary supplement, has just been banned by Brazil's equivalent of the FDA for cosmetic purposes in injectable form. That agency lists the known risks of phosphatidylcholine as including nausea, diarrhea, depression and arrhythmias.

Even the FDA-approved drugs that Bissoon uses haven't been approved for these sorts of cocktail injections. But Bissoon doesn't seem troubled by this. "The biggest complication I see with mesotherapy," he said, "is black and blue marks."

However, Donofrio says she's aware of reports of toxic reactions "where pieces of skin will die and slough off." A report from Belgium, for example, cited several examples of serious skin infections.

Bissoon said that those infections happened because the doctors were sloppy. "We use gloves, we use sterile needles. ... Using the proper technique you should not really have that worry," he said.

20/20's investigation found no reports of bad infections in American patients.

Where Does the Fat Go?

The drug cocktail actually does seem to break down fat, as Bissoon claims.

Professor Susan Fried, an obesity expert at the Baltimore VA Medical Center, tested Bissoon's concoction on human fat cells. "The rate of fat breakdown actually increased about two to three times," Fried said.

However, Fried cautions that the fat being released may go places you don't want it to. "The question is, what happens to those fatty acids? Could they end up in another tissue? Could they end up in your artery? That's a real concern."

Bissoon said the fat should go into your bloodstream because that's how stuff is going to get excreted. "But as far as getting a large component of fat in the blood vessels," Bissoon said, "I don't think that's possible to happen because it's a very slow process."

Several other medical experts *20/20* consulted said they were skeptical about mesotherapy's claims, or they hadn't heard of it. They expressed concern about the minimal research behind the therapy.

Fried was concerned about the release of the fatty acids. She said if they are released from the fat cells, they're going to go to other tissues.

"Those tissues could possibly use them to deposit fat within them where they could cause damage to the tissues, and increase our risk of diabetes and cardiovascular disease," she said. "Just because the fat is released does not mean that it's burned. If that fat is moved from the thigh to your heart or to your liver, it can actually cause diabetes."

But Flack says she's not worried. "I do other things to protect myself," the singer said. "I see a nutritionist weekly, and I have myself checked all the time."

Still, Donofrio says she's concerned. "I think that people need to be cautious. This is their body. You get one."

But Bissoon is confident that the therapy is effective and safe. And so, this latest way to zap fat looks likely to continue. And that thrills Bissoon's patient Noonan-Ewald, who says she plans to keep up the mesotherapy and keep melting away her unwanted fat.

What Is Mesotherapy?

- Mesotherapy is the practice of injecting small amounts of medication and/or vitamins into the mesoderm — or middle layer of skin.

- The technique was pioneered in France by Dr. Michel Pistor, and has been performed there since 1952. There are some 15,000 mesotherapy practitioners in France. There are far fewer practitioners in the United States, and there is no single certification process for performing the therapy.
- Mesotherapy has been used in the treatment of acne, arthritis and joint problems, sports injuries as well as for cosmetic purposes, such as reducing cellulite and weightloss. While each mesotherapy treatment may involve hundreds of small injections, the treatment sessions typically take only minutes to complete.
- Some of the drugs Dr. Bissoon and other mesotherapists inject include aminophylline, an asthma medication, and isopreteranol, a cardiac medicine. Both are FDA-approved, but not for cosmetic use. Many, including Dr. Bissoon also use phosphatidylcholine, which is not an FDA-approved drug in injectible form. It is manufactured in a compounding pharmacy. Others use phosphatidylcholine in a European drug called Lipostabil, which the FDA also has not approved.
- The number of mesotherapy treatments needed depends on a number of factors: the severity of the condition, the cause of the problem are chief among them. Response to therapy is generally seen after three to five sessions. Long-term, chronic conditions such as cellulite and wrinkles, may require at least 15 sessions. Sports injuries and acute conditions may require only one to three therapy sessions.
- Cost of the treatments vary. The price of a single session can cost several hundred dollars.

— Rogene Fisher, ABCNEWS.com