

The power *of* light

*Minimally invasive laser
technique works alone or in
combo with traditional facelifts*

Ilya Petrou, M.D.

SENIOR STAFF CORRESPONDENT

Facelifting techniques have evolved over the years and are trending toward minimally invasive procedures with less downtime.

New and innovative approaches, such as the use of laser-assisted incisional techniques, can be used alone or in combination with traditional or less-invasive short-scar facelifting techniques, optimizing aesthetic outcomes.

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Patrick McMenamin, M.D.
Sacramento, Calif.

“It is the early days for this novel and still evolving laser-assisted facelifting technique; however, in the right hands, the aesthetic results achieved can be significant,” says Patrick McMenamin, M.D., past president of the American Academy of Cosmetic Surgery, who is based in Sacramento, Calif.

Minimally invasive laser-based technologies are coming of age and are now being used as a minimally invasive surgical approach in cosmetic surgery. The laser-assisted incisional technique is quickly becoming more popular in cosmetic surgery because the results achieved can rival those achieved by more invasive surgical approaches, and in some areas, even surpass those cosmetic results achieved with traditional approaches.

“Traditional and short-scar facelifts do not always adequately address certain areas of the face including the nasolabial folds, jowls, oral commissure and lower part of the lip. The laser-assisted technique can help lift and tighten these areas for more pronounced cosmetic outcomes,” Dr. McMenamin says.

HOW IT'S DONE Under tumescent anesthesia, Dr. McMenamin typically will make four small incisions — one behind each earlobe and one at each lateral aspect of the submental crease, just inside the inner cortex of the mandible. Using a Blugerman rasp and 4 mm spatula, tunnels are created under the skin throughout the lower two-thirds of the face and neck. Specially designed cannulas are then inserted through the incisions and laser energy is applied within pre-marked multiple grids in the target areas.

In the laser-assisted facelifift procedure, Dr. McMenamin uses Sciton's JOULE with its combined Nd:YAG 1,064 nm and 1,319 nm wavelengths. Many different laser manufacturers promote their technology and wavelengths used as the best in terms of inducing controlled trauma in the subcutaneous tissues. According to Dr. McMenamin, no singular technology or laser platform has yet scientifically proven its technology to be optimal for this indication.



Dr. McMenamin

“Using the laser-assisted technique, we can create trauma under the skin similar to the way you would in standard facelifift techniques. In my opinion, both the mechanical and heat trauma that we exact in the targeted tissues and the ensuing healing ability of the body are what is in part responsible for the

cosmetic outcomes achieved,” Dr. McMenamin says.

Regardless of the laser technology used, it is important to apply the laser energy and heat the targeted subcutaneous tissues to a constant temperature ranging between 40 and 42 degrees Celsius. This subcutaneous heating will induce neocollagenesis and reorganization of the architectural structure of the skin, which can result in an aesthetically pleasing outcome.

“In essence, we are creating a traumatic wound, and it is our knowledge of the body's ability to heal and how it is going to heal that can potentially create positive aesthetic results,” Dr. McMenamin says. “The premise is that the laser technology applied to the undersurface of the skin is easier and gentler on the tissue when compared to more invasive surgical approaches.”



A female patient before (left) and nine months after laser facelifift, including one small incision behind each ear lobe and one at each end of the submental crease. (Photos credit: Patrick McMenamin, M.D.)

COUNT COMBO PROCEDURES IN

Robert H. Burke, M.D., F.A.C.S., of the Michigan Center for Cosmetic Surgery, Ann Arbor, Mich., says, “There is an obvious trend towards minimally invasive facelififting procedures. A laser-assisted technique is less invasive than

traditional facelififting approaches. However, depending on the degree of skin laxity, I believe that this technique cannot achieve similar



A female patient before (left) and 12 months after laser facelifift, including one small incision behind each ear lobe and one at each end of the submental crease. (Photos credit: Patrick McMenamin, M.D.)

outcomes as traditional surgical techniques unless one performs it in combination with traditional surgical procedures.”

The facelififting technique chosen depends on physician and patient preference of procedure, as well as the degree of skin laxity and amount of lifting required. Where only minimal



A female patient before (left) and four months after laser facelifift, including one small incision behind each ear lobe with very limited submentoplasty. (Photos credit: Patrick McMenamin, M.D.)

improvement of definition may be required along the jawline and neck, Dr. Burke says he may first use the laser-assisted technique and then follow up with liposuction to remove the excess fluid and liquefied fat that accumulates as a result of the procedure. In those patients in whom more lifting around the mid- to lower face, jawline and neck is required, Dr. Burke says he may combine this laser technique with traditional facelififting procedures.

“If there is significant skin and fascia laxity in the mid-facial area, you either have to remove skin and tighten fascia or you have to add volume in order to take up that laxity in the skin,” Dr. Burke says. “Depending on the degree of aging, there may really be no way around a traditional facelifift or a short-scar surgery to get significant aesthetic outcomes.”

📍 *Laser-assisted* continued

PROPER PATIENT SELECTION The laser-assisted technique can achieve good cosmetic outcomes when chosen in the right patient and when matched with the severity of skin laxity seen in a given patient. Some

cosmetic patients may have lack of volume in the face combined with skin and facial laxity. Here, Dr. Burke says he may only perform a fat transfer or use fillers such as Sculptra (poly-L-lactic acid, Sanofi-Aventis) or one of the hyaluronic acid fillers to restore the volume loss. However, some patients may benefit most

from the combination of a filler technique with the laser-assisted technique and/or a more traditional surgical lift — again, depending on the degree of correction and improvement needed.

“I choose my lifting techniques based on the patient’s needs, the degree of skin laxity they have and the time frame that they will want the results. Hyaluronic acid fillers can be ideal for a ‘quick fix’ if the patient wants fast results and does not have the time for the downtime associated with other, more invasive, techniques.”

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“I choose my lifting techniques based on the patient’s needs, the degree of skin laxity they have and the time frame that they will want the results,” Dr. Burke says. “Hyaluronic acid fillers can be ideal for a ‘quick fix’ if the patient wants fast results and does not have the time for the downtime associated with other, more invasive, techniques.”

Using the laser-assisted incisional technique, the wounding process initiated from heating the tissues can result in a more enhanced contraction and tightening of the tissues. The subtle nuances and parameters involved in this process remain unknown, however, and need to be scientifically elucidated and defined.

“There is a definite induction process in terms of applying thermal energy under the skin using the laser technique, and we are wounding the targeted tissues in a different manner than we would with the mechanical wounding process during traditional facelift surgery,” Dr. McMenamin says. “Using this laser approach alone or in combination with standard surgical approaches can achieve good results. However, there is still much to be learned with the laser-assisted technique.” ◀

Disclosures:

Dr. McMenamin is a member of the advisory board, a consultant, an investigator, a speaker, and receives honoraria from Sciton. The Michigan Center for Cosmetic Surgery is a Cynosure Corporation Center of Excellence and a clinical resource center. Dr. Burke trains surgeons on the use of this technology.



A 69-year-old female patient before (left) and at age 70, 13-and-a-half months postop. The patient received Smartlipo (Cynosure) of the neck and as assistance for the face with facelift. (Photos credit: Robert H. Burke, M.D., F.A.C.S.)



A 25-year-old female patient before (left) and three weeks after receiving a Smartlipo (Cynosure) minimally invasive necklift, performed with the Smartlipo device only. (Photos credit: Robert H. Burke, M.D., F.A.C.S.)