



## REFRACTIVE SURGERY

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# Re-treatment requires forceps to maintain clear interface, avoid flap damage

**The interface should be as pristine as after an initial procedure.**

*by Peter S. Hersh, MD*

The desire for a cleaner break between the flap and stromal bed for laser in situ keratomileusis (LASIK) led me to design a spatula and forceps for the procedure.

I disliked the re-treatment technique that required me to pick under the flap with a spatula, break it for 360° and sweep under it. That led to more debris and epithelial cell infiltration.

I developed the Hersh LASIK Re-treatment Spatula (AE-2766) and Forceps (AE-4366) [ASICO, Westmont, Ill.] to make a clean break between the flap and stromal bed. Since I have switched techniques, flaps are easy to pick up and have clean surfaces afterward. I rarely have to recut anyone.

The main theme of the technique involves forceps that are essentially double-pronged, non-tooth edges with Pierce-style tips that allow me to peel back the flap without disturbing the underlying bed or putting undue tension on the flap.

### How I do it

I mark at the slit lamp with a marking pen at the flap border. I then go to the laser and scratch down with the tip of the spatula for a 1-mm area so I can see the stromal surface of the flap's edge.

I then flatten the spatula out and break that juncture. I make sure not to really go under the flap, but to break it for 1 mm internally. Then I sweep up and down for 2 mm, which gives you about a 4 mm total area where the adhesion has been broken.

I then take the forceps, grasp the edge and simply peel back the flap at this point. I do no sweeping underneath the flap at all and keep the bed and the undersurface of the flap untouched after lasering. I bring it back gently, using the double-pronged forceps, avoiding any striae or stress on the flap.

Double-pronged instruments are better than single prongs because they distribute tension more evenly. The ones I developed have a grasping surface, so you do not have to squeeze as hard as you would have to do with flat forceps. They provide a better purchase on the tissue. Also, the design, unlike 0.12-mm forceps, does not damage or get stuck on the tissue.

To finish, I lay the flap down over a protective sponge, proceed with the laser re-treatment and restore the flap to its position. I like to first push back any epithelium from the edge to retard ingrowth.

I use a fairly dry technique to restore the flap. I then massage it down gently using another instrument, the Hersh LASIK Flap Positioner (Visitec, Sarasota, Fla.).

### Three advantages

I have found three advantages to my new technique.

I can fairly easily pick up almost any flap. In my past 100 re-treatments, there has been only one that I could not lift — a 22-year-old woman out for 2 years. The flaps of all other patients out for at least 2 years have been easily lifted.

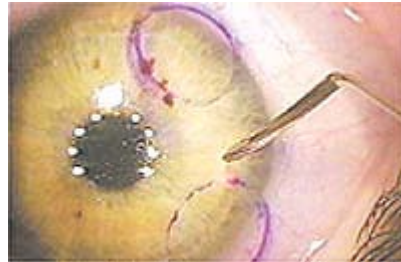
Second, I do not have to go under the flap with the spatula, which avoids any trauma and implantation of epithelial cells or debris. It is easy to peel up the flap with the forceps, which avoids trauma as well.

Third, the double prongs avoid any stress, strain or damage to the flap.

I have examined 100 patients since switching to this technique. Under the slit lamp, the interfaces all look as clean as with my standard first procedure.



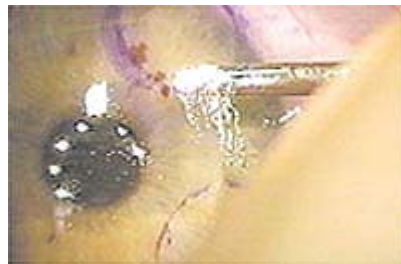
**The flap border is marked** at the slit lamp with a marking pen.



**The tip of the spatula is used** to scratch down a 1-mm area to better observe the stromal surface of the flap's edge.



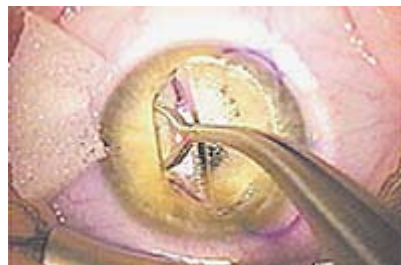
**The spatula is flattened out** and the juncture between flap and bed is broken, making sure not to really go under the flap, but to break it for 1 mm internally.



**The spatula is swept** up and down for 2 mm, which gives about a 4 mm total area where the adhesion has been broken.



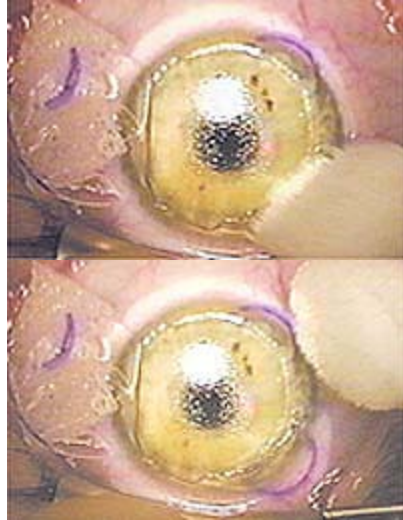
**The forceps are used** to grasp the edge and the flap is simply peeled back.



**The flap is brought back gently**, using the double-pronged forceps, avoiding any striae or stress on the flap.



**The flap is laid down** over a protective sponge and laser re-treatment proceeds.



**Any epithelium is pushed back** from the edge in order to retard ingrowth.



**The flap is restored** and massaged down gently using another instrument.

#### **For Your Information:**

- ASICO can be reached at 26 Plaza Drive, Westmont, IL 60559; (630) 986-8032; fax: (630) 986-0065.
- Visitec Co. can be reached at 7575 Commerce Court, Sarasota, FL 34243; (800) 237-2174; fax: (941) 359-2015.