

OCULAR SURGERY NEWS 11/1/03

Aptos thread aids in mild to moderate brow and forehead lift

The polypropylene thread is pending approval in the United States.

Victor B. Lopez, MD

The aging face has sagging tissues that are currently treated with surgical lifts in different areas using different procedures. Forehead and brow ptosis are among the common problems encountered in the aging face.

Different surgical modalities have been described to correct such deformities. Major surgical operations are characterized by a difficult rehabilitation period with possible complications. Most of these techniques entail drastic surgical procedures and a long recuperation period. Sometimes there are unacceptable scars, so patients who need such corrections may be hesitant to undergo the procedures.

The procedures include direct brow lift, in which case the scars are unacceptable for someone with young Asian skin, or it may be an open flap forehead lift, which may widen the forehead of male patients with receding hairlines. It may be an endoscopic procedure, in which postoperative edema and hematoma increase the downtime of patients.

A less traumatic alternative is Aptos thread, developed by Dr. Marlen Sulamanidze of Moscow. Aptos, which is short for anti-ptosis, is a special polypropylene thread that has been used since 1999 to lift different areas of the aging face. The thread is not yet approved by the Food and Drug Administration for use in the United States. According to manufacturer KMI, data has been submitted to the FDA, and approval is pending. The thread is manufactured with cogs that create slanting edges with sharp ends. The cogs provide a bidirectional path for the thread through soft tissues. This provides a uniform and even gathering of soft tissues, creating lift and volume contour. The convergent cogs also fix the lifted tissues in the required position. This provides support and fixation to the new contour.



Thread length is tried for sizing. (All photos courtesy of Victor Lopez, MD.)



Entry and exit points of the needle are infiltrated with local anesthesia.



After anesthetic infiltration, the guide needle is inserted along the course of the marked areas at a required depth.



The thread is threaded through the guide needle.

Needle exits at the other end of the area.



The guide needle is pulled out, and the thread is left in place.

Procedure

Botulinum toxin injections are needed at least 3 to 4 days before the procedure. This paralyzes the procerus and corrugator muscles and part of the superior orbicularis oculi muscle, which prevents the downward pull of the brow and forehead. These structures are usually severed from their insertions in most forehead lift techniques.

The areas and directions of the thread placements are planned and marked with skin markers. The superior marks should be beyond the hairline, similar to endoscopic skin incisions. Local infiltration anesthesia is used with a thin-gauge needle.

A long spinal needle is used as a guide for the thread. The area of entry, area of exit and the passage in the fat of the guide needle are infiltrated with 2% xylocaine. Epinephrine 1:100,000 may be used with local anesthesia. The guide needle is inserted through the skin along marked areas at the required depth and brought out at the exit point. The inner guide of the spinal needle is removed, and the thread is threaded through the needle. The guide needle is then removed, leaving the thread in the area with its ends sticking out. Once all the threads are placed, the patient sits up, and the threads are pulled. This allows the cogs to engage in the soft tissues, and the forehead and brow are lifted to the desired level. The ends of the threads are then cut below the skin surface. Minor swelling and hematoma may occur along the threaded areas. These effects are usually minor and resolve in less than a week.

Uses, outcome

This procedure can be used for other focal ptosis of soft tissues of the infraorbital, zygomatic, buccal, mental and submental areas. Facial, eyelid and neck rejuvenation, such as blepharoplasty, skin peeling, botulinum toxin injection, contour injections of a variety of gels and skin reinforcements, may be combined with this procedure as needed.

Aptos thread procedures are easy and quickly performed. Rehabilitation is quick, and the final outcome can be seen on the operating table at the conclusion of the procedure. It is a simple and conservative procedure that leaves no visible scars and is ideal for mild to moderate brow and forehead ptosis with excellent and long-lasting results.

For Your Information:

- Victor B. Lopez, MD, section chief at the University of the East Department of Ophthalmology and Makati Medical Center Department of Ophthalmology, can be reached at Makati Medical Center, 2 Amorsolo St., Makati City, Philippines 1200; (63) 2-892-9619; fax: (63) 2-893-4367; e-mail: vbimd@pacific.net.ph. Dr. Lopez has no direct financial interest in the products mentioned in this article, nor is he a paid consultant for any companies mentioned.
- Kolster Methods Inc. (KMI), manufacturer of the Aptos thread, can be reached at 1170 N. Gilbert St., Anaheim, CA 92801; (714) 956-1964; fax: (714) 956-1965; Web site: www.featherlift.com.

Copyright ©2004 SLACK Incorporated. All rights reserved.