

# Managing Lasik Keratome Complications

---

**Article Rating: NA**

**Submitted by: Sam on 2007-06-12 and viewed 322 times.**

**Total Word Count: 478**

**Author Rating:**

## **Sample of Content:**

Application of adequate suction is essential for intraocular pressure upsurge and dissection of good quality corneal flaps. On occasion, the suction ring slides prior to the buildup of adequate vacuum and the flap is decentered from the pupillary axis.

## **Content:**

Managing Lasik Keratome Complications

State of the art LASIK technology avoids the following problems during quality laser eye surgery

The Sliding Suction Ring

Application of adequate suction is essential for intraocular pressure upsurge and dissection of good quality corneal flaps. On occasion, the suction ring slides prior to the buildup of adequate vacuum and the flap is decentered from the pupillary axis. This is reported to happen more frequently with the Hansatome microkeratome due to a slower rise in vacuum. Applying equal downwards pressure on the ring through its handle and at the base knob for about 3 seconds prior to initiating vacuum has minimized this problem.

On occasion, the initial vacuum results in a decentered ring with a large slant requiring the surgeon to release the vacuum to reposition the ring. It is not uncommon to see the ring sliding back in the conjunctival groove created by the initial suction. Decentering the ring in the opposite direction prior to activating suction may achieve good centration as the vacuum level may be high enough by the time the ring slides close to the center to prevent further slide towards the initial groove.

Another approach is to change the ring size (e.g. from 8.5 to 9.5 mm), hence avoiding the chemotic conjunctiva. Some surgeons advocate applying Vasocon-A (Alcon Laboratories, Fort Worth TX) allowing a decrease in conjunctival swelling prior to reattempting the procedure 30 minutes later. If this does not resolve the conjunctival chemosis, further difficulties might be encountered and it is best delaying the surgery for another day

#### The Mid-Cut Jam

The suction ring has fit well, the keratome slides easily in place and the cut is proceeding smoothly until...it stops half-way and does not respond to either forward or backwards pedal commands. This unpleasant

situation can occur secondary to a mechanical or electrical failure of the keratome. The main goal of the surgeon in that situation is to protect the flap and the bed from the keratome blade. Although resuming forward movement may result in an uneven cut, we have not encountered this in our experience.

A quick check of electrical wiring may reveal a loose connection especially at the connection with the keratome motor. Every keratome should be handled differently in this situation and the surgeon should inquire about the best approach to handle such a situation. For the Hansatome, if no movement can be initiated, careful release of suction and sliding the keratome-suction ring as one unit backwards will ensure that the flap is not incarcerated under the blade. The keratome head cannot be reversed along the track manually. On the other hand, with the Automated Corneal Shaper (ACS), releasing suction might trap the flap under the footplate. It is therefore preferable to disassemble the keratome head from its base without releasing suction.

**Article Source:** <http://www.articlebillboard.com/>

## **About the Author:**

<b>Author Bio:</b><br>

Adapted from: "101 Pearls in Refractive, Cataract and Corneal Surgery"

Samir Melki MD PhD and Dimitri T. Azar MD editors, Slack inc.

www.slackinc.com Dr. Melki is a experienced <a href="http://bostonlaser.com/lasik-boston-vision-correction-lasik-affordable.php">Boston affordable LASIK surgeon, Laser Eye Surgery</a>,</p></div>

---

07-09-2010

Page 3/4

Vision Correction and [Cosmetic Surgery](http://bostonlaser.com/lasik-boston-cosmetic-procedures.php)