A FOCUS ON INTACS: MANAGING PATIENTS WITH KERATOCONUS

Tips on diagnosing and comanaging patients to maintain the integrity of the cornea.

AOC *interviewed* ***Jaclyn A. Munson, OD, FAAO,*** *about her perioperative care of patients with keratoconus.*

Why is it important for ODs to identify patients with keratoconus?

It is critical now more than ever. We have new technologies that may prevent and sustain the integrity of the cornea to avoid high-risk corneal transplants. We have new ways to intervene that are repeatable and may offer patients improved quality of life.

How do you diagnose patients with keratoconus?

There are subjective symptoms and objective signs to reference. Ask patients about any family history of corneal disease, how often the prescription of their lenses fluctuates, and how often they rub their eyes. It is sometimes difficult to differentiate eye rubbing induced from dry eye, true ocular allergies, binocular vision issues, and/or associated near blur due to a steep cornea. Upon general observation of the adnexa, I have often noted bilateral eczematous blepharitis localized near the nasal canthii. This signals severe, chronic eye rubbing and has helped me focus on potential corneal issues. Additionally, patients with significant symptoms of daytime glare often go unnoticed. With each of these presentations, I rely heavily on objective signs. A solid corneal topographer is your best friend in these instances.

In addition to topographical analysis, other objective signs to be mindful of include irregular retinoscopy reflexes, progressively asymmetric cylinder power with inconsistent refractive endpoint, unresolved monocular diplopia during refraction, and increased cylinder power required when assessing the most appropriate reading power. Most of these findings are ruled out fairly early in the examination process with careful refraction, whether in or out of the phoropter. Thorough slit-lamp inspection for corneal striae, stromal thinning, Fleisher ring, and specifically, intercorneal asymmetric Munson sign (no relation to the author) with inferior gaze positioning are giveaway signs as well.

We care for many pediatric patients in my practice. If topography is not well tolerated and a cycloplegic exam is indicated secondary to irregular retinoscopy reflex, I will often repeat baseline topographical images to rule out the suspicion of keratoconus. I usually schedule both parent and child for comparison baseline topography scans at that examination.

How do you determine if a patient is a candidate for Intacs?

I have a frank conversation with the patient and work in tandem with surgeons to educate him or her of the intervention options available. We discuss functional vision outcomes after they watch a short video on the Intacs Corneal Implants (OASIS Medical) procedure (Figure). If patients are seeking more conservative measures of surgical intervention, and if they have achieved 20/30 or better visual acuity with specialty contact lenses on a stable topography and refraction, I encourage them to get baseline topography scans with the surgeon. If objective or subjective signs progress and their vision is 20/30 or worse, I will recommend they repeat scans with the likely recommendation of Intacs to follow.

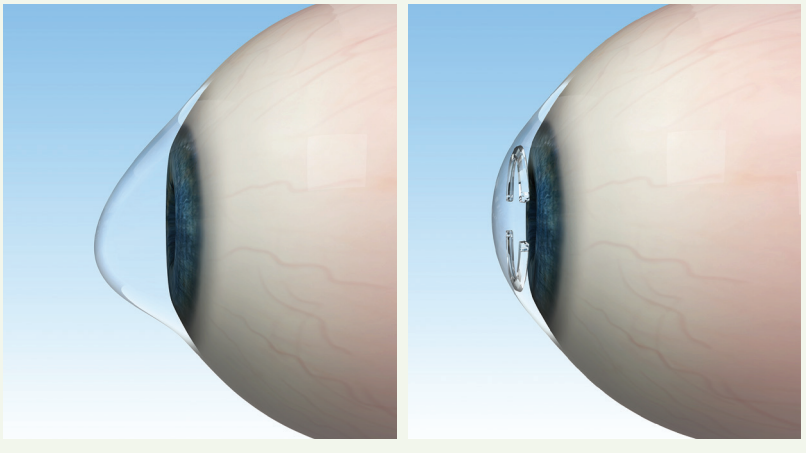

Figure. OASIS Medical's Intacs Corneal Implants for Keratoconus reshape the cornea to a more natural state.

What has been your experience working with a certified Intacs surgeon?

For the most part, it has really been seamless, and my patients and I have been pleased with the outcomes. After the Intacs procedure, recovery may be longer than with other surgical procedures. Patients need to know that there are ups and downs and that their vision fluctuates on a daily, if not weekly, basis postoperatively. This procedure strives to preserve the integrity of the cornea, and then providers use other corrective measures such as spectacles or contact lenses to give the best visual clarity. In the past three patients we have treated, we have been able to deliver on corneal stability and improve clarity with minimal need for additional correction. I do not ever promote the possible refractive gain. If we can obtain a refractive improvement, then that is a bonus.

Describe the postoperative care, and how is the OD involved?

Typically, I see the patient 1 week postoperatively. I evaluate for epithelial defects, early signs of infection, and suture positioning. Baseline topography and anterior segment optical coherence tomography are performed at the 1-month follow-up. I monitor for stromal haze or infiltration gathering near the ring segments, secondary infection prevention, and pain and light sensitivity. The most challenging part is managing patients' expectations. I cannot stress enough how variable their vision will be for 3 to 4 months.

Can all patients successfully wear contact lenses after Intacs?

It depends on the postoperative topographical elevation map but, for the most part, yes. Some have done well with soft contact lenses, but most are refit with larger diameter scleral lenses. I typically wait about 3 to 4 months before I perform the new baseline topographies to start a large-diameter lens fit, because corneal healing is required over the adaptation period. ■

CHECKLIST OF PATIENTS' PATH TO CORNEAL RESHAPING

- ☑ Ask about history of eye rubbing and inconsistent vision/spectacle prescription
- ☑ Gather reliable topography (repeat, if needed, to rule out lid involvement/dry eye before diagnosis)
- ☑ Generate solid refraction, as best as possible
- ☑ Obtain multiple location pachymetry (central and peripheral/optical coherence tomography)
- ☑ Inspect for stromal thinning or central scarring
- ☑ Discuss options to avoid keratoplasty (repeat for at-risk family members)
- ☑ Explain that contact lens correction will likely be required following a lengthy healing process
- ☑ Show video of procedure in office, because a picture is worth a thousand words

To establish a patient care team with a Keratoconus Specialist in your area, call (844) 820-8940 or send an email to customerservice@oasismedical.com.

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