Obtain Superior Stability During Macular Surgery

FOCUS ON…

Contact lens is equipped with absorbent ring and flanges that prevent shifting.

BY KAREN APPOLD, CONTRIBUTING WRITER

Insight Instruments' (Stuart, FL) Super View HTC (Hassan-Tornambe Disposable Contact) Lens provides the familiar clarity and quality of the Tornambe contact lens but also features an improved stability mechanism developed by Tarek Hassan, MD — an absorbent four-legged ring.

"The foam ring prevents the lens from moving, providing surgeons with superior control and visualization during macular surgery," says Peter Luloh, president of Insight.

S.K. Steven Houston, III, MD, while a fellow at Wills Eye Hospital, had the opportunity to test and use the latest surgical technologies on a daily basis. "Critically important in vitreoretinal surgery is adequate viewing," he says. "This is especially the case in macular surgery, where we peel membranes thinner than a single hair off the surface of the retina."

Dr. Houston says shifting of the contact lens (one challenge during macular surgery) can lead to induced prism from the lens and distort the view. Previously, the only way to overcome this was to periodically adjust the lens manually.

But this challenge can be minimized with the HTC lens. "A few other companies produce high-magnification contact lenses with some iteration of stabilizing flanges, but Insight Instruments' lens is a step above the rest," Dr. Houston says.

He goes on to say that the HTC lens works well because the contact lens' absorbent sponge flanges hydrate and improve contact with the cornea, limbus, and sclera. "As a result, this lens has superior stability in most patients," Dr. Houston says. "It also has excellent optical clarity with 36º viewing, enabling a complete view of the posterior pole."

A CLOSER LOOK

Unlike other contact lenses requiring assembly in a sterile operating field, the HTC lens is preassembled. No suturing is necessary, so it's ready to use right out of the pack, Mr. Luloh points out.

The flat lens has flanges with four tabs equidistant from each other. The surgeon first places viscoelastic on the lens surface in contact with the cornea and then places the lens on the cornea, using a cotton tip to gently press on the lens to remove any trapped bubbles at the lens-cornea interface. Once the lens is in position, the absorbent sponge flanges begin to hydrate from the fluid on the eye's surface.

Because the flanges and footplates are made from deformable foam, they contact the peripheral cornea, corneoscleral limbus, and sclera at the exact angle between the junction of the lens and these anatomical structures. As a result, the lens sits flush with the ocular surface without any underlying space.

The lens is disposable, so each case has the advantage of a clean, crisp view from the outset.

DELICATE MACULAR WORK

The HTC lens is ideal for patients undergoing surgery for ERM or macular hole or any surgery requiring delicate macular work. It's also well suited for tractional retinal detachments or PVR, when membranes are posteriorly located.

Mr. Luloh says it's designed to perform critical higher-magnification procedures such as ILM peels, as it has an almost one-to-one magnification and a direct unadulterated microscope view.

Dr. Houston says most patients are suitable for the HTC lens; however, for patients with very tight orbits or very narrow palpebral fissures, the flanges can sometimes interfere. In these cases, he easily removes the flanges.

"A key component to improved patient outcomes in macular surgery is optimum viewing," Dr. Houston says. "This can be accomplished by using vital dyes to stain the ILM combined with using contact lenses that offer superior viewing of the macula, like the HTC lens." **RP**

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