



VIVA LAS VEGAS: VBS V

There were several noteworthy discussion topics at the fifth annual meeting of the Vit-Buckle Society (VBS V). In this installment of our continued coverage, NRMD is pleased to highlight a few of these informative sessions. Authors Neepa Shah, MD, and Jeffrey J. Tan, MD, recap lectures that addressed novel procedures for closing macular holes and for manipulating displaced intraocular lenses (IOLs).

Dr. Shah covers lectures by Efrem D. Mandelcorn, MD; James C. Major, Jr, MD, PhD; and Yannek I. Leiderman, MD, PhD, at Friday's session on surgical innovations for closing macular holes. Dr. Tan reviews Saturday's session on IOLs, which featured presentations from George A. Williams, MD; Mark K. Walsh, MD, PhD; M. Ali Khan, MD; and Derek Y. Kunitomo, MD, JD.

—R.V. Paul Chan, MD, MSc; Anton Orlin, MD; and Aleksandra Rachitskaya, MD

Plugging 101



By Neepa Shah, MD

Closing macular holes was a hot topic addressed by a number of speakers during a surgical innovations session at VBS V. Efrem D. Mandelcorn, MD, described macular hole hydrodissection, a novel technique with which he has had some success.

After a standard internal limiting membrane (ILM) peel, the backflush on the soft tip cannula is used to reflux saline into the macular hole, inducing a small neurosensory macular detachment around the site of the hole. According to Dr. Mandelcorn, this process breaks tissue adhesions between the retinal pigment epithelium and the retina that might otherwise impair hole closure. After this step, fluid is drained from the hole using a soft tip cannula so that the edges may approximate. He reported an 87% success rate with significant improvement in visual acuity in 80% of patients using this technique, particularly for large, chronic, and/or persistent holes.

James C. Major Jr, MD, PhD, of Houston, Tex., presented what he dubbed the "Texas Taco" technique for closing large macular holes. The technique involves partially peeling the ILM, leaving an edge of bridging tissue intact at either the temporal or nasal macular aspect, and forming a rolled up "taco" with the ILM tissue to cover the macular hole. During air-fluid exchange, the ILM taco is pushed up against the defect to help close the hole. Dr. Major stressed the importance of ensuring that the ILM is peeled directly around the hole.

Yannek I. Leiderman, MD, PhD, discussed options for closing symptomatic optic pits. He described the pathophysiology of optic pits and the multiple therapies that can be used to address them. When a vitreous stalk is extending from a pit, exerting traction and leading to fluid accumulation, he said a simple vitrectomy with hyaloid

removal should be sufficient. In some cases, however, this will not work, particularly those in which an obvious stalk is not present and fluid keeps accumulating. Dr. Leiderman presented several cases of refractory optic pit maculopathy in which he used fibrin sealant (Tisseel, Baxter) to successfully close the pit.

IOL Gymnastics



By Jeffrey J. Tan, MD

George A. Williams, MD, kicked off a session titled "IOL Gymnastics" with a presentation of a dislocated three-piece IOL in an adult patient with retinopathy of prematurity. He detailed the use of a five-port method, with IOL ports placed 2 mm behind the limbus. In the future,

he said, ultrasound biomicroscopy might be used to measure the exact distance of these scleral tunnels.

Rather than using an injector, Dr. Williams suggested folding the IOL and then using a handshake technique with bent Maxgrip forceps (Grieshaber/Alcon) to externalize the haptics through the cannulas.

He also described a novel three-port technique in which the infusion port and an instrumentation port 180° away are used to externalize the IOL haptics after vitrectomy. Dr. Williams highlighted the need to angle the initial trocar cannula placements properly for haptic externalization and to move the infusion port to the superotemporal cannula when the haptics are externalized. Once the haptics are externalized, he said, the tips can be cauterized and then positioned subconjunctivally (flange technique).

Mark K. Walsh, MD, PhD, also presented on a five-port technique using 27-gauge valved trocars. He said it is crucial to place the cannulas exactly 180° apart. Once the haptics are externalized, they are flanged with high-temperature

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disposable cautery and tucked subconjunctivally until the ball just reaches into the scleral tunnel.

Dr. Walsh continued, noting his experience with an older iteration of sutureless scleral fixation without flanging, which included more than 100 procedures with only eight dislocations, all of which were with old rescued IOLs. With this new flanged technique, he has only had one subluxation out of his first 36 cases, which he attributed to a partial air-fluid exchange putting pressure on the IOL, so he no longer places an air bubble at the end of these cases.

M. Ali Khan, MD, presented his technique using nonabsorbable PTFE monofilament sutures (Gore-Tex) to secure IOLs. The reason he gave for this choice is that polypropylene sutures can break over time, while PTFE sutures may provide longer-term resilience. He described a retrospective series of 85 Akreos AO60 (Bausch + Lomb) and CZ70BD (Alcon) IOL implants.

Dr. Khan said he places PTFE sutures through each of the paired eyelets of the Akreos AO60 IOL. Each end of the PTFE suture is placed into the anterior chamber and externalized through one of four sclerotomy sites using intraocular forceps. The IOL is then folded and inserted through a 3.5-mm clear corneal incision.

He offered various tips: rotating the IOL axis to avoid the patient's nose; using the Akreos AO60 due to the ease of lacing the suture and folding the lens, but acknowledging that this lens carries a risk of postoperative opacification if in contact with air or gas; creating a system for keeping track of sutures; using 25- or 27-gauge instrumentation; using slipknots to adjust IOL position; measuring 3 mm posterior to the limbus for in-the-bag calculations; and using the cow-hitch technique with CZ70BD IOLs.

Derek Y. Kunimoto, MD, JD, introduced a novel lens exchange system. In a video demonstration, the haptic of a three-piece IOL was secured using a steel cylinder and a silicone cord. He suggested placing the IOL into the eye, externalizing the silicone cord and cylinder, pulling the cylinder off the haptic, and tucking it into a scleral pocket. Dr. Kunimoto stated that his lens exchange system can potentially make externalizing haptics easier and safer. ■

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