



BEST OF SHOW

9 Must-See Videos

WATCH THEM ON
A SCREEN NEAR YOU

ATTEND THE BEST OF SHOW VIDEO AWARDS.

The Best of Show awards ceremony takes place in Grand Ballroom S100ab on Tuesday at 12:30 p.m. and will be followed by a special screening of the nine Best of Show videos (listed below), which finishes at 2:15 p.m.

VIDEOS ON DEMAND. Watch any of this year's 49 videos in Booth 162 at either the computer terminals or in the new Mini-Lounges. The videos also are available on the Academy's website, both onsite and after hours from your hotel (check www.aao.org/2010).

CATARACT

Angle Kappa: The Angle to the Mystery of the Multifocal IOL (V03)

Agarwal and colleagues explain the importance of angle kappa when implanting a multifocal IOL.

Angle kappa can make the difference between a happy and an unhappy patient. The key is to have the IOL well-centered on the visual axis rather than on the pupil. In scenarios like posterior capsular ruptures, a glued multifocal IOL can also be implanted and the IOL adjusted upon centering on the visual axis.

CATARACT

Real-Time Surgical Marking Program for Ophthalmic Microsurgery (V04)

Park and colleagues introduce augmented reality in ophthalmic microsurgery and demonstrate its possibilities.

Preoperatively measured surgical data can be downloaded and reviewed whenever needed. In cataract surgery, the continuous curvilinear capsulorhexis line can be tracked in real-time. The central point and axis of an IOL can be pointed out and, in secondary sclera fixation of an IOL, the positions of the scleral flap and IOL can be indicated. An ink marking can also be replaced with a virtual overlay in penetrating keratoplasty.

CORNEA, EXTERNAL DISEASE

Paste-Pinch-Cut: A Novel Surgical Repair for Conjunctivochalasis (V17)

Doss and colleagues describe a technique for the treatment of conjunctivochalasis in which the redundant conjunctiva is precisely resected.

An arc-like guideline was demarcated inferior to the limbus. A small buttonhole was made in the temporal bulbar conjunctiva at the edge of the marking line. Fibrin glue was then injected through the buttonhole along the line. The conjunctiva was pinched with modified ptosis forceps, gathering the excess conjunctiva into a ridge at the top of which lies the marking line. This ridge was excised, leaving a sealed wound.

CORNEA, EXTERNAL DISEASE

Ultrathin Grafts for Descemet's Stripping Automated Endothelial Keratoplasty (V21)

Busin and colleagues create donor grafts thinner than the conventional ones used in DSAEK.

In all cases, the donor graft was first dissected with a microkeratome head as per routine DSAEK surgery. A second dissection was then performed with a conventional head after artificially thickening the residual bed by hydration.

Alternatively, dedicated heads may be used to perform the refinement step with minimal variability immediately after the debulking step. Ultrathin microkeratome-dissected grafts can be attained consistently—which can help in the pursuit of obtaining the visual outcome of pure endothelial transplantation while retaining the advantages of DSAEK.

UVEITIS

Intraocular Helminth (V28)

Almedia and colleagues discuss two cases of male patients who suffered from an intraocular helminth infestation.

In the first case, a 29-year-old patient with normal visual function presented with a small nematode lodged between muscular fibers of the iris. The parasitological study showed that it was a *Pelecitus* species 5.41 mm in length.

In the second case, a 16-year-old patient presented with low visual acuity and pain in the left eye due to a nematode localized in the anterior chamber. The helminth was morphologically identified as a *Dirofilaria immitis*-like nematode.

OCULAR TUMORS AND PATHOLOGY

Sebaceous Gland Carcinoma: The Leading Masquerade! (V29)

Joshi and colleagues explore sebaceous gland carcinoma. This disease is the most common eyelid malignancy in Asia and the Middle East and masquerades as a wide variety of clinical presentations. The sites of involvement include the eyelid, conjunctiva and caruncle. Clinical variants include a nodule, noduloulcerative lesion or diffuse infiltrative tumor. Excision with margin control—along with a map biopsy to rule out pagetoid invasion—is the preferred treatment. Neoadjuvant chemotherapy, orbital exenteration and adjuvant radiotherapy are considered in tumors with orbital extension or regional lymph node metastasis. The local recurrence rate with the protocol-based approach of management is less than 5 percent.

ORBIT, LACRIMAL, PLASTIC SURGERY

Management of Cicatricial Lower Eyelid Retraction Using En-Glove Lysis and Dermis Strip Graft (V33)

Chang and colleagues separate the lower eyelid retractors from the conjunctiva, inferior tarsus and septum in en-glove fashion through a small lateral upper lid

crease incision. After the middle lamellar scar was lysed, a postauricular dermis strip graft was threaded through the pocket created using a guarded Keith needle and fixated to the medial and lateral canthal tendons. Lateral canthal resuspension was performed without canthotomy, and a reverse Frost suture stented the eyelid for one week. The combination of retractor release, reconstitution of eyelid volume and reestablishment of a buffer between skin and retractors resulted in decreased sclera show and irritative symptoms.

RETINA

Radical Excision of Choroidal Melanoma: Our Experience (V44)

Arias-Palomero and colleagues demonstrate their procedure for the surgical resection of choroidal melanomas.

First, they delimited the tumor margins using an intraocular light. Scleral buckling was made in order to create a large lamellar scleral flap, which cleared tumor margins. They then practiced sclerouveoretomy by increasing the IOP through the infusion and excising the deep sclera, choroid and retina using corneoscleral scissors or the vitrectomy probe. The next step involved phacoemulsification and vitrectomy using laser photocoagulation to treat the margins. Finally, they used silicone oil to fill the vitreous space and tamponade the retina. They also performed cryotherapy in the margins of the scleral flap.

RETINA

Vitrectomy in Keratoprosthesis Patients (V47)

Patients with keratoprosthesis have a relatively high rate of intraocular inflammation. As a consequence, they may have vitreoretinal complications.

Reus and colleagues present the necessary technique to do a vitrectomy with Boston keratoprosthesis and Strampelli osteo-odonto-keratoprosthesis.