# **ASOT** News



#### THE AMERICAN SOCIETY OF OPHTHALMIC TRAUMA NEWSLETTER



## ASOT ANNUAL MEETING & WET LAB MAY 9-10, 2025

ASOT Annual Meeting and Wet Lab will convene May 9-10, 2025 in Houston, Texas. Registration for the 2025 American Society of Ophthalmic Trauma Annual Meeting and Wet Lab will open September 24, 2024.

ASOT Eye Trauma 2025 is an intensive expert-led program focused on improving outcomes for the injured eye. Attendees will be able to learn the latest in diagnosis, treatment, and research, gain exposure to devices, and learn surgical skills for damage control and reconstruction after eye trauma.

The meeting provides front-line practitioners, residents and fellows with an innovative opportunity to share knowledge and collaborate with leading academic, civilian, and military ophthalmic traumatologists from across the globe.

### ASOT invites abstract submissions for the Annual Meeting.

Abstract submissions must be received for consideration by March 1, 2025.

LEARN MORE

#### ASOT FEATURED ARTICLE: CASE REPORT: From insanity to solution for contusion-related scleral thinning

#### Dr. Ferenc Kuhn

A 21-year-old male presented with a sudden loss of vision. His past ocular history was remarkable for a rather severe contusion a year earlier, with no immediate consequence, and high myopia. Upon examination, he had hand-motion vision, an IOP of 40 mmHg, a clear crystalline lens, a large area of scleral "melting" superiorly (anterior staphyloma; Figs. 1 A and B), and a retinal detachment involving the macula. Two days prior he had seen a general ophthalmologist – who recommended (to quote Dave Barry, "I'm not making this up") cataract surgery. Fortunately, the patient and his nurse mother had the common sense to seek a second opinion.

During counseling I explained to them that the young man needed rather urgent vitreoretinal surgery for the retinal detachment, but before this intervention the issue of the sclera as well as the elevated IOP had to be dealt with: vitrectomy is impossible to perform without the sclera's integrity being restored.

It was obvious from the size of the scleromalacia (22x7 mm) that a large patch such as a scleral allograft was the only option. Under general anesthesia, I carefully separated the conjunctiva from the underlying tissue – which turned out to be choroid with a few scleral collagen fiberremnants on top. Both sharp (scissors) and blunt (spatula) tools were used, with occasional help using Healon (Fig. 2). The risk of the delamination is rupturing the choroid: if that happens, the danger of a truly expulsive choroidal hemorrhage (ECH) occurring becomes very real. While ECH of other etiologies is usually manageable via immediate wound closure by whatever means, an ECH developing in the context of scleral melting is much harder to stop before the eye is lost.

The next surgical step was to fashion the graft. It needs to be a millimeter larger on all sides (except at the limbus) than the area to be covered: the explant must be sutured onto healthy sclera.

Once the correct graft size was prepared (in this case the area involved was too large for a singlepiece allograft to be used; the smaller second patch was applied after the glaucoma part of the surgery was completed), I sutured the scleral patch, using vicryl 8-0, onto the recipient sclera but initially only on one side. Once the correct graft size was prepared (in this case the area involved was too large for a single-piece allograft to be used; the smaller second patch was applied after the glaucoma part of the surgery was completed), I sutured the scleral patch, using vicryl 8-0, onto the recipient sclera but initially only on one side. The next maneuver is crucial. It is the high IOP that forces the choroid to bulge: it is not advisable (possible) to push it back to level using sutures as they would exert undue tension of the sutures, and since even the normal sclera in a highly myopic eve is thin, eventual cheesewiring is likely. To avoid this risk, gentle diathermy must be applied, preferably with a flat-faced probe over the entire surface of the bulging choroid (Fig. 3). This and the immediate completion of suturing of the patch to the sclera have to take place very fast: within seconds the bulging recurs.

With the patch now secured (with later-to-beremoved 10-0 nylon at the limbal edge), I placed an Ahmed valve in the superotemporal quadrant (Fig. 4): If the IOP remains high, it's not "only" that the glaucomatous damage destroys vision, but the scleral melting may recur and the risk of ECH returns. The operation was completed by suturing the second, small allograft (Fig. 5).

A standard vitrectomy for the retinal detachment, including prophylactic 360-degree laser cerclage was performed a week later. Ten years after the surgeries, the allograft is still in place without scleral thinning (Fig. 6), the retina attached, and the IOP normal. The vision is 20/200 and no improvement is expected.

This case has several important lessons. A contusion in a highly myopic eye introduces the obvious risk of the acute development of a posterior choroidal rupture (which fortunately did not occur in this eye) as well as retinal detachment at a later date. Less common consequences are glaucoma (risk: 3.4%) and scleral thinning over time. The latter threatens spontaneous choroidal rupture with an ECH, and loss of the eyeball.

Treating an eye with an anterior staphyloma is a technical challenge but, more importantly: the surgeon must know what must be done and what needs to be avoided, or as I always emphasize when teaching ocular surgery: what determines success is not "how good the hands are" but whether the brain gives the proper instructions for the hands.

#### ASOT FEATURED ARTICLE: CONTINUED







fig. 3



fig. 2



fig. 4









fig. 6



Submitted by Dr. Ferenc Kuhn

### **Annual Meeting Posters**

Our review committee handpicks the top three posters. Our heartfelt congratulations to all the poster winners!

Here are the 2024 winners:

#9-Fatma Shakarchi-Ophthalmic Emergency Triage #14-Jawad MuayadImpact of Cataract Surgery on the Risk of Orthopedic Trauma

#21-Muhammad Abidi-Epidemiology of Pediatric Orbital Fractures

#### **CLICK BELOW TO VIEW THE 2024 POSTERS**

#### CLICK HERE

Aren't you proud of how far the American Society of Ophthalmic Trauma (ASOT) has progressed since 2020? We've come such a long way, and we have so much more to accomplish! Check out the Evolution of the American Society of Ophthalmic Trauma: A Tale of Trauma, Disaster, and War. Written by: James D. Auran, MD, Robert Mazzoli, MD, Christopher Rapuano, MD, Amy Coburn, MD, Dale Fajardo, EdD, MBA, Emma Koch

#### CHECK IT OUT HERE



#### **EyeNet Magazine** Featured Article Call of Duty

Ophthalmology on the Front Line

From Afghanistan to Gaza to Ukraine, trauma care in modern conflict zones presents distinct surgical challenges. Ophthalmologists reflect on how they navigate patient needs and surgery amid war.

## ASOT COMMITTEES Help Us Grow: Your Expertise is Needed!

## Join us in our mission to improve the management and outcomes of eye trauma through education, research, and collaboration.

Our committees play a crucial role in shaping the direction of ASOT. As a volunteer, you have the chance to lend your expertise, share your insights, and engage directly in the decision-making processes that drive our organization forward.

### GET INVOLVED

MEET OUR COMMITTEE MEMBERS

## CHECK OUT THE POLICY/NATIONAL DISASTER COMMITTEE'S INITIATIVES

- Developed a <u>Hurricane preparedness fact sheet</u> for the ASOT website and social media.
- Submit an AAO Council Advisory Recommendation on disaster eye care that outlines the burden of ophthalmic trauma such as incidence, severity, financial, emotional impacts.
- Submit a white paper to AAO regarding the establishment surgical competency in ophthalmic trauma.
- Support federal legislation to expand liability protections for doctors who choose to volunteer during national or public health emergencies, such as The Good Samaritan Health Professionals Act.
- Advocate for congressional funding of eye and vision research, including funding for research specific to eye injuries through the DOD's Vision Research Program

FIND OUT MORE

READ THE HURRICANE PREPAREDNESS FACT SHEET

#### **NEW!** AAO OPHTHALMIC TRAUMA INTEREST GROUP COMMUNITY PAGE

In the coming weeks you'll receive an invitation to join the <u>AAO Ophthalmic</u> <u>Trauma Forum</u>. We highly encourage you to sign up, engage, and participate on the forum. **Invite your colleagues!** *AAO membership is required to create an account.* 



## ASOT 2024 Annual Meeting Summary

## **Day One Highlights**

**Wet Lab Success**: the lab featured one-on-one teaching in damage control ophthalmology-lids and adnexa, open globe, and lens management.

The annual meeting kicked off that later that evening over a TEX-MEX dinner with outstanding case presentations and lively discussion!

## Day Two Highlights

**Engaging Presentations**: The second day continued with sold-out expert-led Breakfast Roundtables. <u>Topics included</u>: telemedicine, bringing products to market, tips and tricks for open globes, designing a trauma teaching program, ophthalmology in times of war, ethics and eye trauma, eye care in disaster planning, international collaborations and more!

Dr. Q. Wang, Director of the \$20 million dollar Vision Research Program, discussed obtaining funding for trauma research. Tom Zampieri, past president of Blinded Veterans Association led a table on visual rehabilitation.

The day continued with lectures, paper sessions, poster exhibits, and case discussions. Topics ranged from the latest in ocular trauma research to practical approaches for trauma management in both military and civilian contexts.

**Keynote Sessions**: Dr. Eugene de Juan, a distinguished professor from UCSF, delivered an insightful keynote on the evolving management of penetrating eye injuries, setting the tone for the conference. Dr. Jane C. Edmond, President of the American Academy of Ophthalmology gave a compelling session on the etiology and management of strabismus following trauma.

**NASA Presentation**: One of the standout presentations was the NASA symposium, where Colonel Keith Manuel and Dr. Jeffrey A. Jones discussed the intersection of space medicine and ophthalmology. The session covered topics including radiation and advanced telemedicine.

Awardees and Recognition: Several physicians were recognized for their contributions to ophthalmology and trauma care. Notable highlights were symposiums hosted by the leadership of the Asociación Panamericana de Trauma Ocular (APTO), the Asia Pacific Ophthalmic Trauma Society (APOTS) and the International Ocular Trauma Society. We are also grateful to the top leadership of the US and British military who shared their expertise.

> 2024 AWARDEES INCLUDE: KUHN AWARD - DR. RUPESH AGRAWAL LA PIANA-MAZZOLI AWARD - DR. WILLIAM MADIGAN FOUNDER AWARD - DR. AMY COBURN

The ASOT 2024 Annual Meeting successfully advanced the field of ophthalmic trauma care through cutting-edge education, skill-building, and networking opportunities.

We look forward to continued collaboration and innovation in the years ahead. Please save the date for Eye Trauma 2025, May 9-10, 2025, in Houston, Texas!

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Thank you to the 2024 Sponsors! The meeting was a success because of your generous contributions. We are forever grateful for your support!

## What Conference Attendees Are Saying....

Inspiring congress, bringing trauma organizations together. Great teaching facilities at Methodist Hospital, Research Institute and Training Labs.



**66** Very impressive showing by [the] residents and students. **Congratulations to all!** 

2024 Meeting was a blast! It was so great seeing friends and colleagues as we advance the field of Eye Trauma with guest lecturers from across the world.



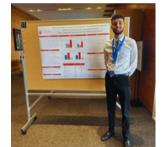
**Excellent opportunity for residents** and trainees in the field to learn hands-on skills at the wet lab.

The depth of content and talent you managed to pack into a single day was frankly astounding; a true "who's who" of eye trauma luminaries all in one place!

> **Truly excellent meeting**, quite the best ophthalmic conference l've been to.





























Watch the full conference or check out more photos on Instagram

SEE THE GALLERY



#### Watch the Annual Meeting



# SAVE THE DATE

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Thank you to all of our attendees from around the world!



### **CONGRATULATIONS!**

**Dr. JIM AURAN** as the newest member of the Programmatic Panel for the CONGRESSIONALLY DIRECTED MEDICAL RESEARCH PROGRAMS (CDMRP) Vision Research Program (VRP).

LEARN MORE ABOUT CDMRP

## Looking for More Ocular Trauma Resources?

#### AAO OCULAR TRAUMA PAGE

ASOT IS ON SOCIAL MEDIA

EMAIL: INFO@THEASOT.COM



1935 County Road B2 W Ste 165 Roseville, MN 55113