OPHTHALMIC HOSPITALIST INTEREST GROUP

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OPHTHALMIC HOSPITALIST INTEREST GROUP NEWSLETTER

Donna Kim, MD | Maggie Hymowitz, MD

Announcements

Join the Community!

Read about various ophthalmic hospitalist set ups, corneal ulcer culture algorithms, and more!

AAO/OHIG Online Community!

OHIG Topic Wishlist

Have a topic or clinical case that you'd like to feature in a future OHIG newsletter? We welcome your ideas and expertise. Feel free to email ohig@ohig.org

Welcome New Members!

Thanks for joining OHIG! Please verify your information on the OHIG website.

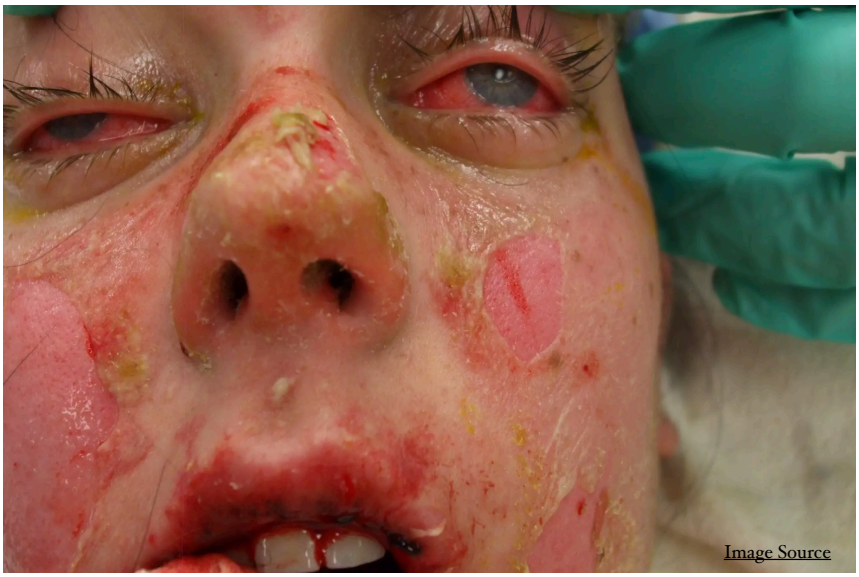


Image Source

Articles

New Grading Systems and Treatment Guidelines for Acute Manifestations of SJS, Ophthalmology, 2016

A helpful grading system that aids in the evaluation and management of SJS/TEN.

Sutureless AMT with Cyanoacrylate Glue for SJS/TEN, Ocular Surface, 2019

Techniques for bedside AMT procedures useful for SJS/TEN.

Accuracy and Cost-Effectiveness of a Telemedicine Triage Initiative for Patietns with Suspected SJS/TEN, JAMA Dermatology, 2021

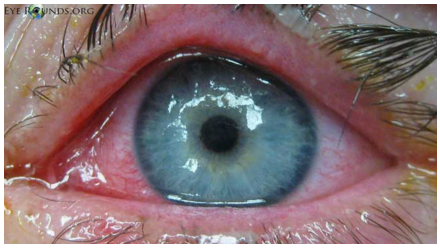
A study showing how telemedicine can improve triage for SJS/TEN and reduce the number of patients transferred without need for burn unit care.

PEARLS

Prokera Instructional Video

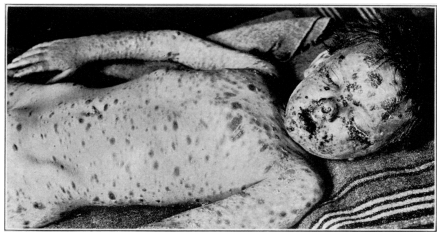
A video reviewing instructions on how to insert and remove Prokera.
Click Here

SJS Tutorial For Residents



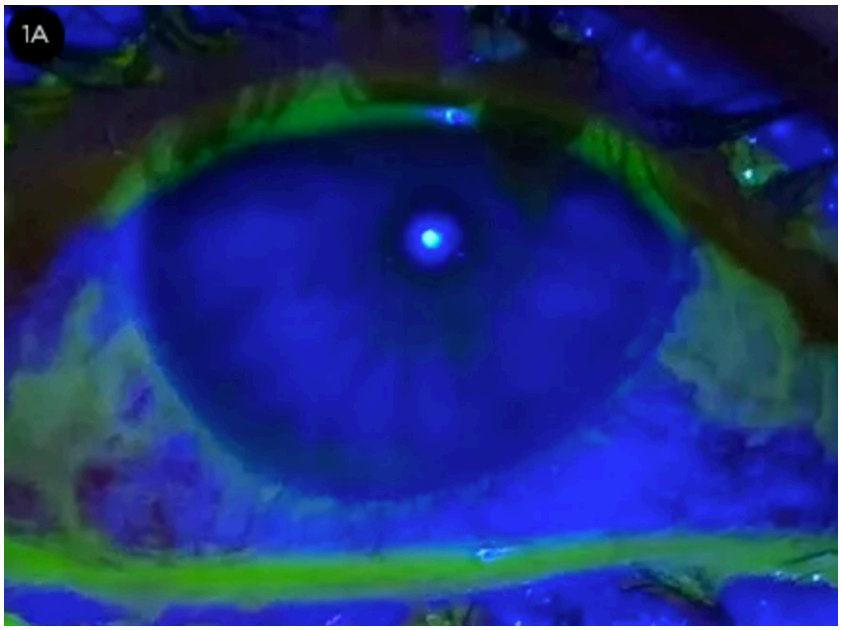
A teaching resource for residents from Univ of Iowa on SJS.
Click Here

Who is Stevens and Johnson?



Check out the original article by Dr. Stevens and Dr. Johnson who first published on SJS in 1922.
Click Here

CONSULT ROUNDS



You are paged to see a 12 year old male in the PICU with suspected Stevens-Johnson Syndrome (SJS) with eye pain and blurry vision.

The patient has a history of ADHD and anxiety and was started on lamotrigine 1 month ago. He developed headache, cough, mouth blisters, and a rash after his dose was increased 5 days ago and was admitted to an outside hospital for suspected SJS. He was then transferred to the PICU in your hospital for escalated wound and supportive care.

On exam, he is PH 20/70 OD, PH 20/25 OS, without APD. His intraocular pressures are 15 and 16. His anterior segment is notable for 3+ conjunctival injection in both eyes, lissamine green staining on the lid margins of all 4 eyelids and the bulbar and palpebral conjunctiva of both eyes, and large central epithelial defects in both eyes. Dilated fundoscopic exam is within normal limits.

The patient is diagnosed with toxic-epidermal necrolysis (TEN)with involvement of 50% of the body surface area. Mycoplasma serology is obtained to rule out MIRM (mycoplasma-induced rash and mucositis) and is found to be negative.

The patient is started on lacrilube ointment q2 hours, moxifloxacin QID, cyclosporine 0.05% QID, and prednisolone 1% QID in both eyes. The patient is continued on fluid resuscitation and undergoes wound debridement in the OR with the Burns Team the next morning. Prokera Plus® are placed in each eye at that time. The patient develops respiratory failure and is placed on a ventilator with sedation.

The following day, the patient is found to have significant adhesions between his upper lids and the Prokeras®. AmnioGraft® is placed at bedside using a sutureless technique and new Prokeras® are inserted over the amniotic membrane in both eyes. The patient is examined daily and on the third day, the amniotic membrane is noted to be degraded.

An EUA is performed in the OR and symblepharon are found in the right eye and none in the left eye. There is notable lid margin and conjunctival staining with lissamine green in both eyes. The epithelial defects are healed in both eyes. The amniotic membrane and Prokeras® are replaced OU in the operating room.

Over the following two weeks, the patient has the amniotic membrane and Prokeras® replaced 4 more times in the right eye and 3 more times in the left eye. This is done both at bedside using a sutureless technique and twice in the OR.

EUAs performed in the OR show persistent and repeated symplepharon formation in both eyes. There is palpebral conjunctival scarring and conjunctivalization of the lid margin in the left eye. The corneas remain without epithelial defects. During this time, the patient's skin and mucosal findings improve and he is extubated.

The patient stays in the hospital an additional week, during which time the amniotic membrane are removed and replaced with only the Prokera® in both eyes. This is much better tolerated by the patient.

He is discharged 5 weeks after admission with the Prokeras® removed. His vision at discharge is 20/20 in each eye, there is no lissamine green or fluorescein staining in each eye, but with persistent symblepharon and conjunctivilazation of the lid margin. He is discharged on the following medications: preservative-free artificial tears q1-2 hours while awake, cyclosporine 0.05% QID, and prednisolone 1% QID. His family arranges follow-up with a local cornea specialist the following week.

Case Considerations:

Stevens-Johnson syndrome (SJS) is a life-threatening immune-mediated reaction involving blistering and desquamation of the skin and mucous membranes. When more than 30 percent body surface area is involved, the disease is called toxic epidermal necrolysis (TEN). Most often a drug is the cause, but infectious triggers and idiopathic cases also occur.

Ocular complications of SJS/TEN are vision-threatening and require quick and aggressive intervention. Acute inflammation of the entire ocular surface, from eyelid margins to conjunctiva to cornea, can cause symblepharon, corneal epithelial defects, and limbal stem cell loss, which can lead to vision loss and problems that persist long after the rest of the body has healed.

In our case, the patient required several rounds of amniotic membrane placement both in the operating room and at bedside. For more efficient placement, we used a sutureless technique that can be done at bedside, see referenced article below.

Articles and Image Source:
https://www.aao.org/eyenet/article/a-primer-on-stevens-johnson-syndrome
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7811360/pdf/nihms-1025524.pdf

Dr. Jennifer Yu, MD, PhD
Clinical Associate Professor
University of Washington

*We would like to extend a special thank you to OHIG member **Dr. Jennifer Yu** for sharing this interesting case and highlighting the use of sutureless AMT for SJS/TEN in the hospital.*

SJS Consult Survey Question

Question: How are you managing large non-healing corneal epithelial defects in your hospital SJS patients? Select all that apply:
A) Topical antibiotics
B) Topical steroid
C) Bandage CTL
D) Prokera Ring
E) Surgical Tarsorrhaphy
F) Surgical AMT
G) Sutureless/Glue AMT
H) Other: list below

Submit your responses on the AAO/OHIG Online Community:
https://aao.mobilize.io/main/groups/47315/lounge