Mini-incision for the treatment of an infected inclusion cyst of a conjunctival nevus.

Hôpitaux Universitaires Genève **Emmanouil Blavakis, Mateusz Kecik, Gabriele Thumann, Horace Massa** Department of Ophthalmology, Geneva University Hospitals, and Faculty of Medicine, University of Geneva, Switzerland



Case Presentation

- A healthy 36-year-old-man presented for a redness and pain in his left eye for 1 day
- Visual acuity: 20/20 OU
- Intraocular pressure: 17 mmHg OU
- Slit lamp OS: conjunctival hyperemia and a conjunctival nevus with 4 inclusion cysts, one of which was filled with a purulent material
- Fluoresceine staining of the conjunctival epithelium was negative
- No signs of any intraocular inflammation or infection



Treatment

- Topical anesthesia with oxybuprocaine 0.4% and disinfection with povidone-iodine 5%
- 1 mm length mini-incision of the white cyst was performed using a 30G needle, followed by a bimanual drainage of a
 purulent material using 2 sterile eye-spears
- Topical treatment: tobramycin 3mg/ml (Tobrex[®]) and moxifloxacin 5mg/ml (Vigamox[®]) every 3 hours for a week

Mini-incision for the treatment of an infected inclusion cyst of a conjunctival nevus.

Hôpitaux Universitaires Genève **Emmanouil Blavakis, Mateusz Kecik, Gabriele Thumann, Horace Massa** Department of Ophthalmology, Geneva University Hospitals, and Faculty of Medicine, University of Geneva, Switzerland



Follow-up

- Swab of the purulent drainage: positive for Gram+ flora
- One week follow up: absence of symptoms
- Slit lamp OS: conjunctival nevus with 4 inclusion cysts, all filled with a transparent liquid. Conjunctiva was calm, negative fluorescein staining.
- No recurrence at one year follow-up



Discussion

- Herein we present a case of an infected cyst forming a conjunctival abscess which could in certain circumstances like immunodeficiency have sight-threatening consequences, advocating for a more aggressive treatment.
- Given the absence of ocular trauma and the negative fluoresceine staining, a possible hypothesis for the origin of the infection could be a micro-traumatism of the cyst due to blinking.
- This hypothesis is also supported by the fact that Gram + bacteria from the normal periocular flora were found in the purulent drainage of the cyst.

Mini-incision for the treatment of an infected inclusion cyst of a conjunctival nevus.

Hôpitaux Universitaires Genève **Emmanouil Blavakis, Mateusz Kecik, Gabriele Thumann, Horace Massa** Department of Ophthalmology, Geneva University Hospitals, and Faculty of Medicine, University of Geneva, Switzerland



Discussion

- In this case, the infected conjunctival inclusion cyst was treated like an abscess, where incision and drainage are essential for management^(Long, 2022)
- Differential diagnosis of a conjunctival abscess should include inflamed pinguecula, episcleritis or scleritis, conjunctival neoplasms, and foreign body granuloma.
- Thorough medical history paramount importance for the identification of predisposing factors to conjunctival inclusion cysts such as strabismus surgery or conjunctival nevi and to exclude any history of ocular trauma.
- In case of recurrence, surgical excision followed by histopathological and microbiological analysis should be considered.

Conclusion

Conjunctival inclusion cysts, although considered benign, can become infected and form a conjunctival abscess. A mini-incision on the slit-lamp combined with bimanual drainage and followed by topical antibiotic drops seems to be a safe and effective treatment.