Oral antibiotics and Internal Hordeolum, Preseptal and Orbital Cellulitis
Shalu Pal, O.D.

Internal Hordeolum
An internal hordeolum is typically a staph aureus or epidermidis infection of the meibomian gland or lash follicle. Haemophilus influenza can be the bacterial cause in children.¹ Our common first line treatment options include warm compresses, digital massages, lid hygiene and topical antibiotic ointments. Systemic antibiotics should be considered if there are recurrent episodes, chronic meibomitis or no response to hot compresses due to poor compliance.² Preseptal cellulitis is a potential risk and may speed up the need for antibiotics.²
Antibiotics to consider:
- Augmentin 500 mg BID
- Keflex (cephalexin) 500 - 750mg BID
- Amoxicillin 500mg TID
- Dicloxacillin 125mg to 250mg QID away from food
- Erythromycin 250mg QID
- Doxycycline or minocycline 250mg QID
If allergy to penicillins or cephalosporins, consider Bactrim q12H, doxy or a fluroquinoline.³
If allergy to pencillins, cephalosporins, and sulfa, consider Levofloxacin 500mg QD.³
All antibiotics are to be typically maintained for seven to 10 days. Hot compresses should be continued during antibiotic treatment.²

Preseptal Cellulitis
Preseptal cellulitis is an infection of the soft tissue of the eyelid anterior to the orbital septum. It can originate from an internal hordeolum, trauma, ethmoid sinus infection or dental infection.¹ There is typically pain and edema but no visual disturbance, no proptosis and no ocular motility restriction. Preseptal infections need to be treated quickly to avoid an orbital cellulitis from developing. Antibiotic treatment options are the same for preseptal as they are for a hordeolum. An insect bite can mimic a preseptal infection but the pain is much less and more localized. Oral antihistamines such as diphenhydramine or prednisone along with cold compresses for several days will do the trick.² Lacrimal gland inflammation can also mimic preseptal cellulitis. It is rare and usually occurs in viral infections such as mumps, influenza and measles.

Orbital Cellulitis
Orbital cellulitis is an infection that passes the orbital septum of the lids and spreads to the tissues around the eye. Trauma and infections (i.e. blood borne, paranasal sinus, facial, lacrimal sac and globe infections) can all cause an orbital cellulitis. In addition to pain and lid edema, fever, illness, vision loss, proptosis and ocular motility restriction are often present. This is an ophthalmic emergency that requires immediate administration of IV antibiotics to avoid blindness and potentially life threatening complications.¹

References

Dr. Pal received her Doctor of Optometry degree from the Southern California College of Optometry. She completed her Contact Lens and Cornea residency at Northeastern State University Oklahoma College of Optometry where she is certified in therapeutic pharmaceutical
agents, glaucoma and anterior segment lasers. Dr. Pal has a contact lens specialty practice in Toronto, Canada. She is an adjunct faculty at the University of Waterloo and a facilitator and coordinator of industry contact lens workshops at optometry schools throughout North America.