FLOPPY EYELID SYNDROME

- Overview
  - First described in 1981 by Culbertson and Ostler
  - Stereotypical patient is a obese, middle-aged male
Epidemiology

- Race
  - most commonly reported in caucasian race - probably artifact

- Age
  - usually discovered from 40-50, range 25-80

- Sex
  - slightly higher prevalence in men
• Generally consist of ocular injection and irritation.

• Itching and stringy mucous discharge, particularly upon awakening are also common.

• The symptoms may appear unilaterally or asymmetrically.

• Often correlating with the side the patient sleeps on
SYMPTOMS

• Often Associated with Chronic Obstructive Sleep Apnea
  • Daytime Somnolence
  • Morning Headaches
• Frequent episodes of waking up during the night
PHYSICAL FINDINGS

• Eyelids are Floppy, Rubbery, and Easily Evertible.

• Associated with a chronic papillary conjunctivitis of the upper palpebral conjunctiva.

• Lash ptosis, ptosis, and dermatochalasia

• Punctate corneal epitheliopathy and mucous strands in the tear film and fornices may also be apparent

• May be associated with meibomian gland dysfunction/atrophy, dry eye, and rosacea
PHYSICAL FINDINGS

• Periobital changes
  • Brow ptosis, dermatochalasis, Blepharoptosis
  • Attenuation or dehiscence of the lateral canthal tendon
  • Lacrimal gland prolapse
• Lagophthalmos
PATHOPHYSIOLOGY

- Several histopathologic studies have demonstrated a significant decrease in tarsal elastin.

- Tarsal collagen appears normal in patients with floppy eyelid syndrome.
PATHOPHYSIOLOGY

- Two theories as to the cause of the corneal and conjunctival findings:
  - most widely held theory suggests that, because of the lid laxity and tendency of these patients to lie on their sides or in a "face-down" position, spontaneous lid eversion occurs during sleep which leads to mechanical abrasion of the ocular surface
  - poor apposition of the upper eyelid to the globe, instigating an inadequate tear distribution and subsequent desiccation of the ocular surface and ocular inflammation.
Chronic Obstructive Sleep Apnea (COSA)

- High association with Floppy Eyelid Syndrome
- Associated with other serious ocular disorders such as:
  - Glaucoma
  - Ischemic optic neuropathy
  - Papilledema secondary to increased intracranial pressure.
Chronic Obstructive Sleep Apnea (COSA)

- Potentially Fatal
- Can lead to systemic or pulmonary hypertension
- Congestive heart failure from cardiomyopathy
- Cardiac arrhythmia
MEDICAL REFERRAL

- Weight loss and consultation with a sleep physician for appropriate studies are highly recommended to detect COSA

- Treatment of obstructive sleep apnea
  - Nasal continuous positive airway pressure (CPAP)
  - Surgical intervention usually involves modification of the oropharyngeal airway
MEDICAL MANAGEMENT

• Topical lubricating or antibiotic ophthalmic ointment in the affected eye is indicated for mild corneal or conjunctival abnormalities.

  • Prefer erythromycin secondary to coexisting meibomian gland dysfunction

• Doxycycline 100 mg PO qd, may be prescribed if meibomian gland dysfunction and/or rosacea is suspected.

• Tape the eyelids closed and/or wear an eye shield while asleep to protect the conjunctiva and the eye from rubbing on the pillow
• Horizontal shortening of the lateral upper eyelid can be performed by a full-thickness resection of the lateral one third of the eyelid margin or via tarsal strip

• prefer at one third of the eyelid margin

• lower eyelids can be tightened at the lateral canthus using a standard lateral tarsal strip procedure

• Small lateral tarsorrhaphy may be beneficial