Evaluation and Management of Age-Related Eyelid Problems

Craig Lewis, MD
Disclosure Statement

• Speaker, Craig Lewis, M.D. has a financial interest/agreement or affiliation with Lansing Ophthalmology where he is a shareholder and employed as an oculoplastic specialist.

• I have no financial interest in any of the products discussed.

• Off-label use: I will discuss off-label use of botulinum toxin products.
Oculoplastic Specialist

• What is oculoplastics?
  – Specialized field of ophthalmology:
    • Eyelids
    • Tear drain
    • Orbit
  – Medical problems
  – Cosmetic concerns
Age-Related Eyelid Problems
Age-Related Eyelid Problems

• Droopy upper eyelids
  • Extra eyelid skin
  • Ptotic upper eyelid
  • Droopy eyebrow

• Droopy (loose) lower eyelids
  • Inward turning (entropion)
  • Outward turning (ectropion)
  • Floppy eyelid syndrome

• Eyelid surgery basics

• Q & A
Upper Eyelid Changes
Droopy upper eyelids

• Extra upper eyelid skin: Dermatochalasis
  – Blocks vision
  – Heavy, tired sensation
Droopy upper eyelids

- Extra upper eyelid skin: Dermatochalasis
  - Problem: Extra skin hangs over eyelid
  - Cause: Time + gravity + movement of eyelids
  - Treatment: Blepharoplasty surgery
Droopy upper eyelids

- Blepharoplasty surgery
  - Treats extra skin hanging over eyelid
  - Removes redundant skin and extra fatty tissues
Blepharoplasty

• Steps:
  – Mark skin
  – Remove flap of skin and orbicularis muscle
  – Open orbital septum to remove fat if needed
  – Close skin
Blepharoplasty
Blepharoplasty
Potential Benefits of Surgery

• Side vision improved
• Reading vision better (more light)
• Less strain by not lifting brow
• Rested appearance
Possible Complications

- Hemorrhage
- Lagophthalmos
- Retraction
- Under-correction
- Over-correction
- Ptosis
- Web
- Crease
Blepharoplasty

Before

After
Blepharoplasty

Before

After
Upper Eyelid Ptosis

Drooping of eyelid due to weakness of the lifting muscle.

Excess skin

Weak lifting muscle
Upper Eyelid Ptosis

- Ptotic upper eyelids
  - Blocks vision
  - Tired sensation, often worse in evening
  - Brow aches
Upper Eyelid Ptosis

• Droopy upper eyelids
  – Problem: Eyelid does not open far enough to see well
  – Cause:
    • Most common: gradual stretch or dehiscence of levator palpebrae superioris or Muller’s muscle
    • Other causes, some serious
Levator palpebrae superioris

Muller’s muscle
Upper Eyelid Ptosis

• Potential serious causes:
  – Muscle disorders
    • Myasthenia Gravis, Lambert-Eaton Syndrome
  – Nerve disorders
    • Multiple sclerosis, compression from mass (lung cancer)
  – Blood vessels problems
    • Aneurysm (CNIII palsy), Diabetes
  – Orbital disease
    • Orbital mass, Graves Eye Disease
Upper Eyelid Ptosis

• Potential serious causes:
  – Warning signs:
    • Droopy lid + double vision
    • Droopy lid + pain/headache
    • Suddenly droopy lid
Upper Eyelid Ptosis

• Ptotic upper eyelids
  – Most common cause: stretching levator muscle
  – Treatment: Eyelid ptosis repair surgery

• Eyelid ptosis repair surgery
  – May be done from under the eyelid or through the skin
Blepharoptosis surgery

• Internal approach: CML
  – Conjunctivo-mullerectomy-levator resection
  – All from inside, no skin incision
  – Advantages: natural contour, no skin scar, more predictable

• External approach: ELR
  – External levator resection
  – From outside through bleph-type incision
  – More powerful for very droopy eyelids
Blepharoptosis surgery: CML
Blepharoptosis surgery: CML
Blepharoptosis surgery: CML
Blepharoptosis surgery: CML
Blepharoptosis surgery: CML
Blepharoptosis surgery: CML
Blepharoptosis surgery: CML
Blepharoptosis surgery: CML
Blepharoptosis surgery: CML
Blepharoptosis surgery: CML
Ptosis repair: ELR

Before

After
Ptosis repair: CML

Before

After
Ptosis repair: CML
Ptosis repair: CML

Before

After
Ptosis surgery: Complications

• Bleeding
• Retrobulbar hemorrhage: rare after CML
  – Orbital septum not violated
• Lagophthalmos
• Retraction
• Under-correction: most common complication
• Over-correction: rare
Congenital Ptosis

• Causes:
  – Poor development of levator muscle
  – Horner’s syndrome
  – Many others

• Problems:
  – Amblyopia
  – Abnormal head position

Photo from: http://www.aapos.org/terms/conditions/90
Congenital Ptosis

• Challenges:
  – Poor levator muscle function cannot be directly improved
  – Lagophthalmos may worsen after ptosis repair
  – Cosmetic concerns

Photo from: http://www.aapos.org/terms/conditions/90
Eyebrow Position

• Determine normal for each individual
• Maintain facial expression
• Proportional to face
Eyebrow ptosis

• Droopy eyebrow skin
  – Blocks vision, especially to the side
  – Heavy sensation
Eyebrow ptosis

- Droopy eyebrow skin
  - Problem: Extra tissue from eyebrow hangs over eyelid
  - Cause: Time + gravity
  - Treatment:
    - Eyebrow ptosis repair surgery
    - BOTOX® brow lift
BOTOX®

- Purified BOtulinum TOXin
- Temporarily weakens muscles
  - 3 month effect per treatment
- Indicated for wrinkles between brows (glabellar area)
- Black-box warning 2009
- Other similar drugs:
  - Dysport®, Myobloc®, Xeomin®
Eyebrow Surgery

• Above eyebrow
• Above hairline
• Hairline
• Forehead Crease
• Internal (through eyelid surgery opening)
Eyebrow Surgery

Before

After
Brow Surgery

Before

After

After
Eyebrow and Upper Lid Surgery

Before

After
Eyebrow and Upper Lid Surgery

Before

After
Eyebrow and Upper Lid Surgery
Eyebrow and Upper Lid Surgery
Age-Related Eyelid Problems

• Droopy upper eyelids
  • Extra eyelid skin
  • Ptotic upper eyelid
  • Droopy eyebrow

• Droopy (loose) lower eyelids
  • Inward turning (entropion)
  • Outward turning (ectropion)
  • Floppy eyelid syndrome

• Eyelid surgery basics

• Q & A
Droopy Lower Eyelids

- Eyelid entropion
  - Lower eyelid that rolls in
  - Problem: Irritation as lashes rub against eye
  - Cause: Loose eyelid with spasm of orbicularis oculi muscle
  - Treatment:
    - Usually surgery
    - BOTOX® (FDA approved)
Eyelid Problems

• Eyelid ectropion
  – Lower eyelid that turns out
  – Problem: Irritation or tearing as eyelid doesn’t protect eye
  – Causes:
    • Usually loose eyelid (time and gravity)
    • Mechanical (ex: tumor)
    • Cicatricial (ex: dermatitis, post-surgical)
  – Treatment: Drops or ointment, often surgery
Cicatricial Ectropion

Lower eyelid blepharoplasty complication
Cheeklift

Loose lower eyelids
Cheeklift and Upper Eyelid Blepharoplasty

Before

1 month after
Cheeklift and Upper Eyelid Blepharoplasty
Eyelid Problems

• Floppy eyelid syndrome
  – Chronic eye irritation due to extremely loose eyelids
  – Often worse on ‘downhill’ side
    • Eyelid turns over while sleeping
  – Strong association with obstructive sleep apnea
  – Treatment: Shield eyes at night, surgical eyelid tightening, identify and treat OSA
FAQs and Eyelid Surgery Basics
FAQs

• Will insurance cover surgery costs?
• Where is surgery performed?
• What type of sedation is used?
• How long does surgery take?
• How long is recovery?
FAQs

• Does insurance cover eyelid surgery?
  – Lower eyelid malpositions: Yes
  – Upper eyelid/eyebrow surgery: Maybe...
    • Must meet criteria
    • Varies by insurance carrier
FAQs

• Medically necessary upper eyelid surgery criteria:
  1. Causes problem with comfort or vision
     • Blocks vision, heavy, tired feeling
     • No good: Hard to put on make-up, looks bad in mirror
  2. Blocks vision by visual field test
  3. Photos: Eyelid skin drapes over eyelashes OR eyelid crosses near pupil
Eyelid Surgery Basics

• Out-patient surgery at surgical center or hospital
• Monitored anesthesia care most common
• ~1/2 hour per eyelid surgical time
Eyelid Surgery Basics

• Comfort/recovery
  – Most patients have some discomfort/pain for a few days after surgery
  – Usually patients feel fine within 2-4 days after surgery
  – Bruising/swelling universal
Eyelid Surgery Basics

• Scars
  – Any skin incision will leave a scar
  – Eyelid skin is thin & scars are usually minimal

• Follow-up
  – 1 week post-op
    • Remove any stitches
  – 6-8 weeks follow-up visit
Eyelid Surgery Basics

• Down time
  – Plan for two week recovery
  – Vision may be blurry for several days
  – Swelling/bruising for 1-3 weeks
  – During recovery: read, watch TV, listen to music, chat on phone all OK
Eyelid & Eyebrow Surgery

Early Recovery

- Inactivity for 2 to 3 days
- Ice packs for 2 days
- Ointment to suture line
- Can usually drive in 2-3 days
- Avoid strenuous activity for 2 weeks
“Tight” sensation in eyelid area
Incision line blends after 3-5 months
Some swelling in upper & lower lid area
Questions and Answers
Thank you!