Extraocular Tumors

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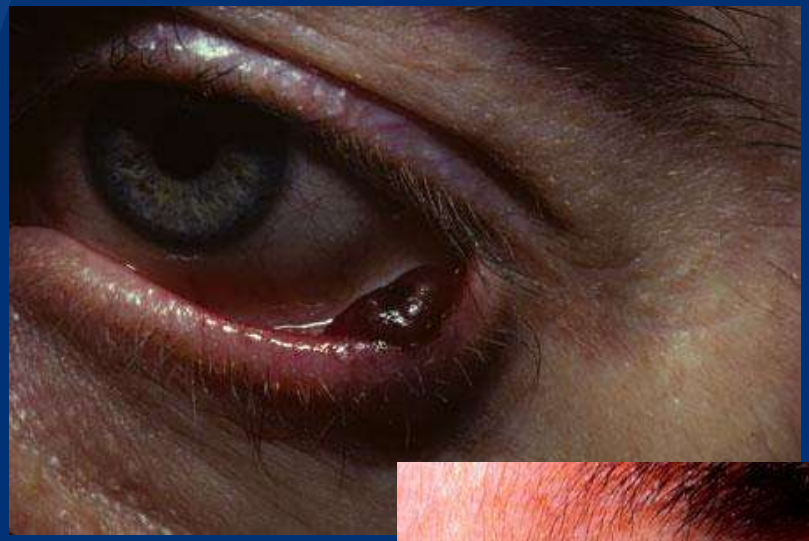
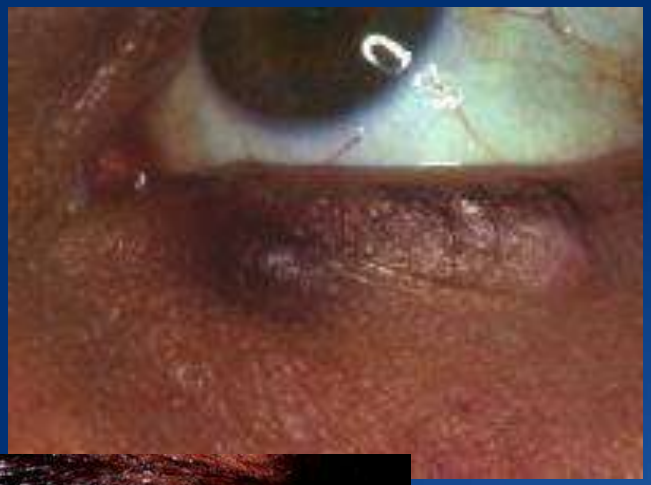
Eyelid Kaposi's Sarcoma

- Malignant tumor
- Immunosuppressed- AIDS, iatrogenic/transplant, elderly
- Eyelid involvement assoc'd with AIDS
- red, purple, brown, or blue subcutaneous; circumscribed, diffuse, nodular, or pedunculated
- ddx: pyogenic granuloma, cavernous hemangioma, amelanotic melanoma, lymphoma, metastatic carcinoma, chalazion

- Tx: chemotherapy if extensive; low-dose radiotherapy if confined

Eyelid Kaposi's Sarcoma



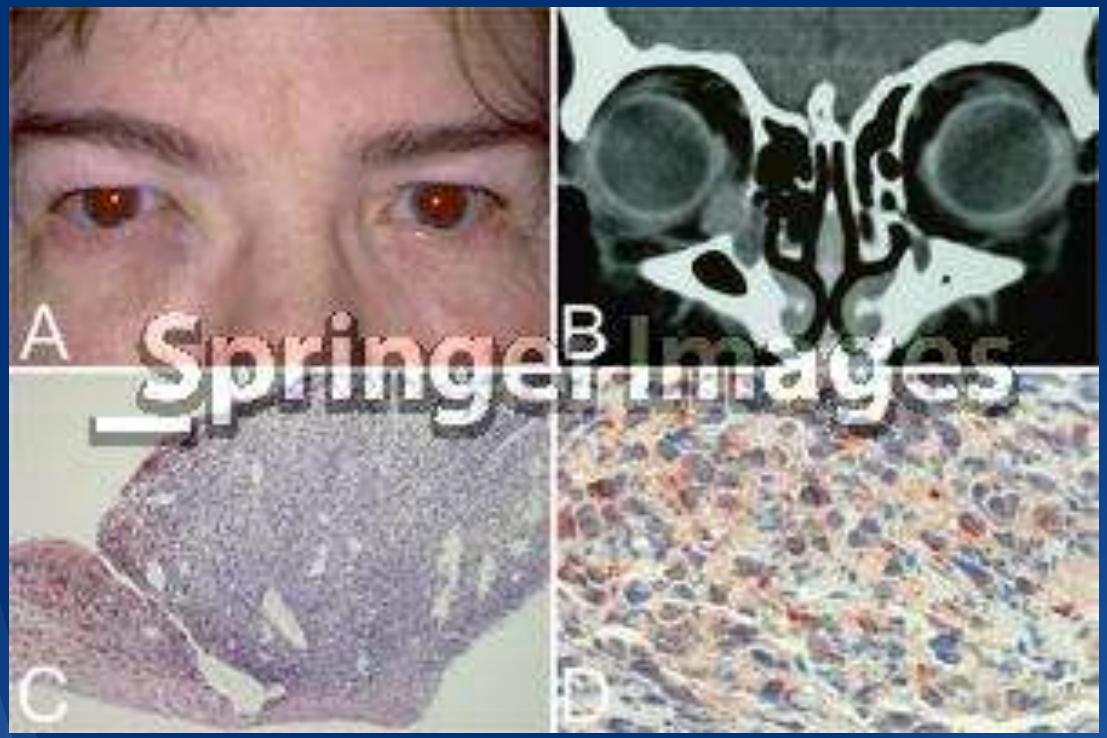


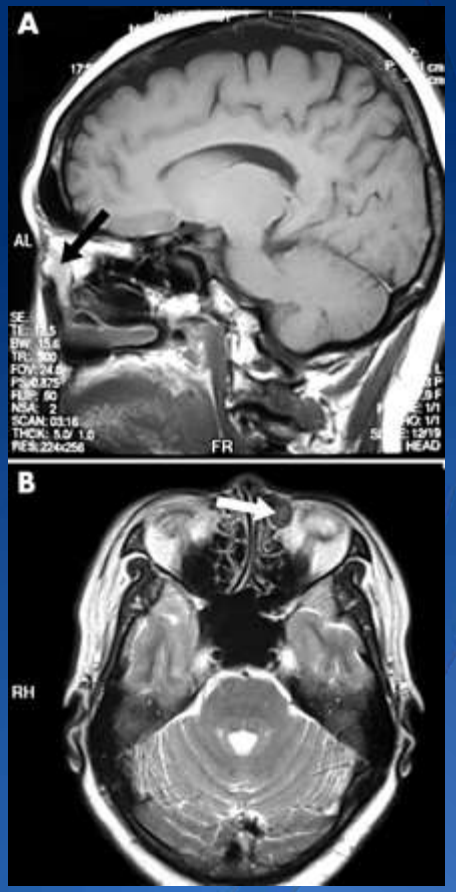
Lacrimal Sac Melanoma

- Origin disputed-- epithelial melanocytes of lacrimal system vs seeding of conjunctiva melanoma or primary acquired melanosis (PAM)
- Bleeding w/in tumor-> darker blue appearance or bloody punctum discharge
- MRI or CT- detect extent of neoplasm and bone involvement

- Tx: wide surgical excision with dacryocystectomy, or exenteration
- Prognosis- guarded, potential for mets

Lacrimal Sac Melanoma



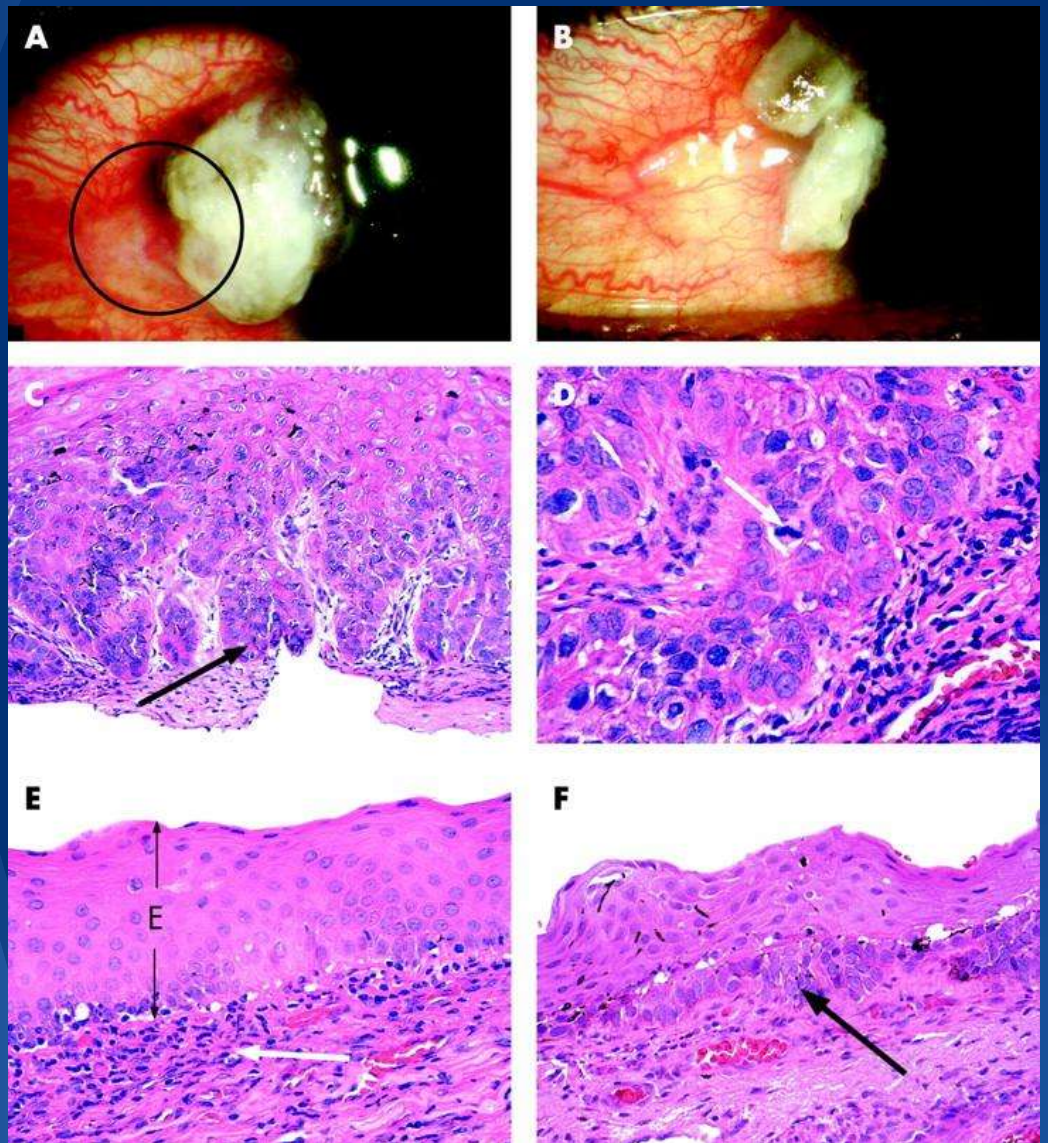


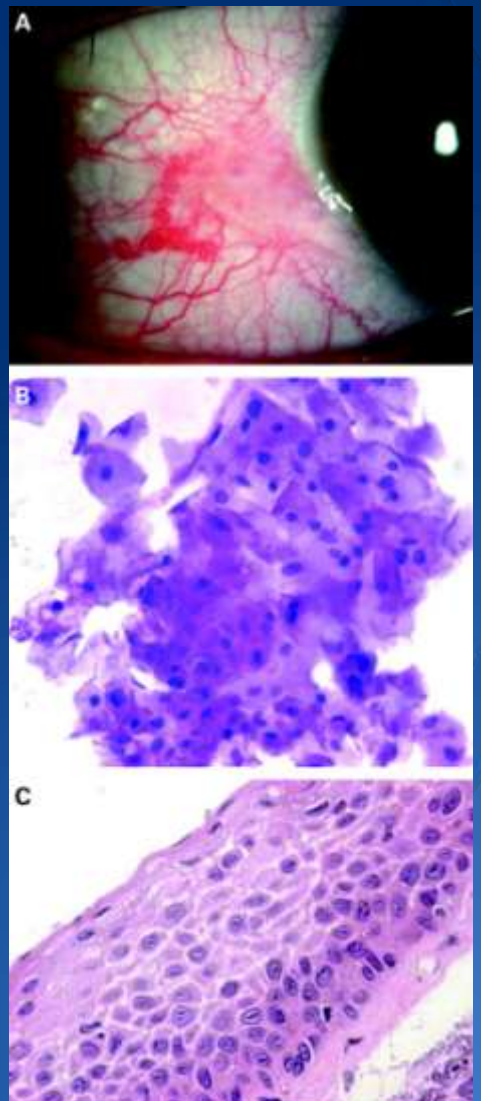
Conjunctival Keratotic Plaque and Actinic Keratosis

- Difficult to distinguish clinically
    - limbal or bulbar conj, usually interpalpebral
- Flat, white plaque appears gradually
- May appear over pingueculum or pterygium
- May also appear similar to conjunctival intraepithelial neoplasia (CIN)- greater potential to evolve to invasive SCC

- Tx: surgical excision and cryotherapy
- Prognosis: generally good, may be acceptable to follow progression

Conjunctival Keratotic Plaque and Actinic Keratosis





CIN vs Invasive SCC

- NO metastasis potential
- Can progress to Invasive SCC (breach of BM)
- Factors: sunlight, HPV, fair-skinned, immunosuppressed
- Several variations, but usually fleshy, sessile, or minimally elevated
- Tx: complete excision +/- cryotherapy, irradiation, mitomycin c, antiviral, 5-fu

- LOW metastasis potential (1-2%)
- Factors: xeroderma pigmentosum, atopic eczema, ie- T lymphocyte dysfunction
- Clinically similar to CIN
- extensive leukoplakia raises suspicion
- mucoepidermoid, spindle cell forms: more aggressive

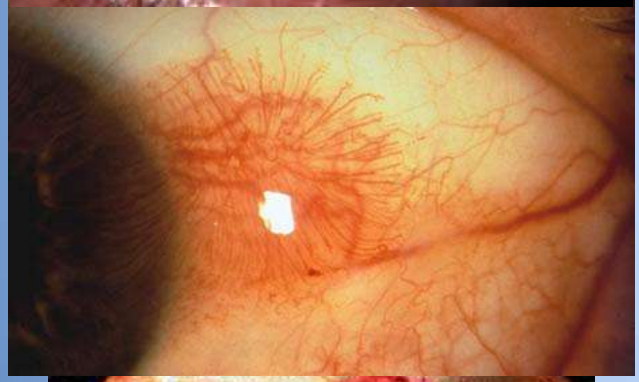
Invasive SCC cont'd

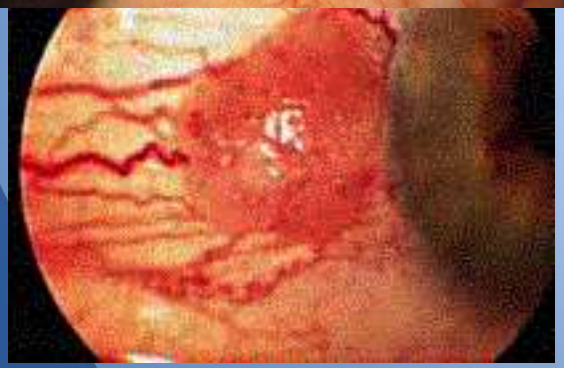
- Tx: complete excision= alcohol corneal epitheliectomy, wide partial lamellar scleroconjunctivectomy, double freeze thaw cryotherapy +/- ancillary techniques
- exenteration for extensive orbital invasion
- Intraocular invasion may mimic ant. uveitis

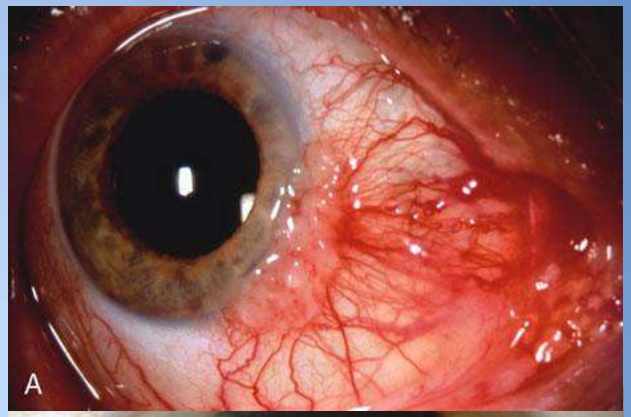
* caution- hx of excision of SCC who later develops "uveitis" + ^ IOP

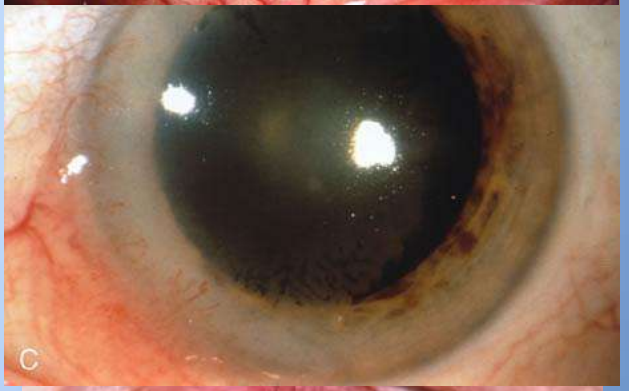
- Prognosis: good--local recurence rate 5%, regional lymph node met 2%

CIN vs Invasive SCC







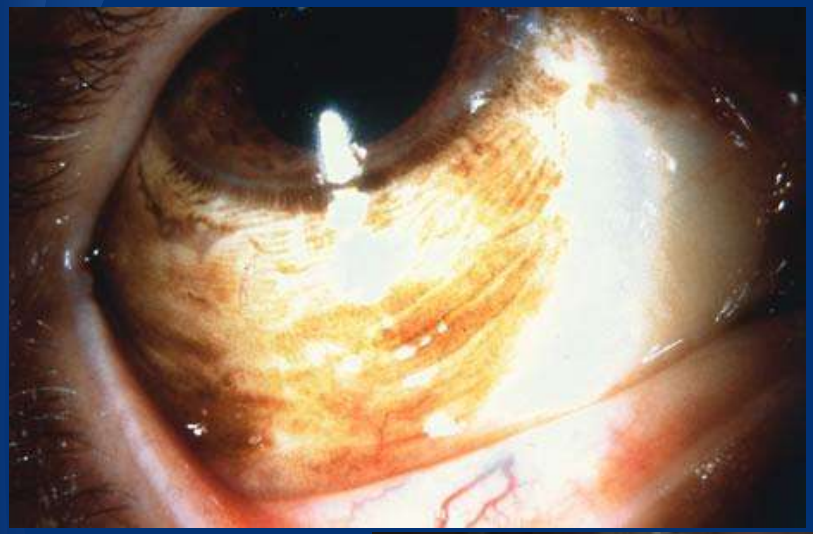


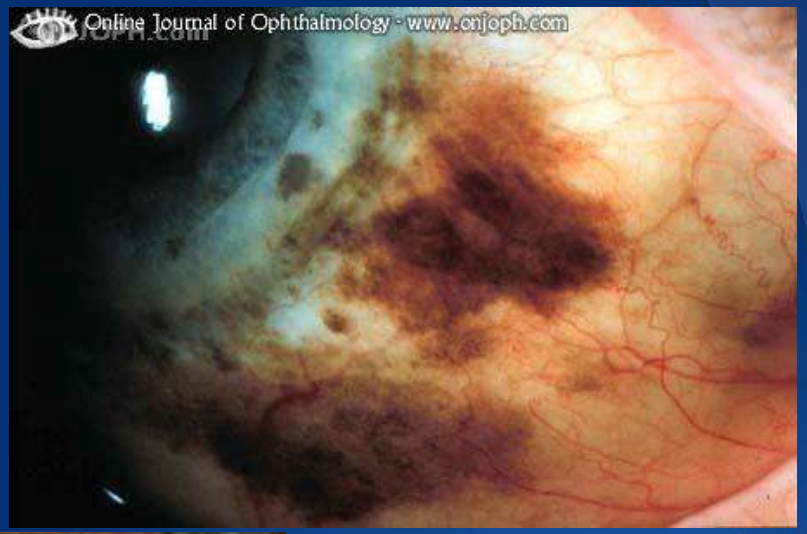
Conjunctival Primary Acquired Melanosis (PAM)

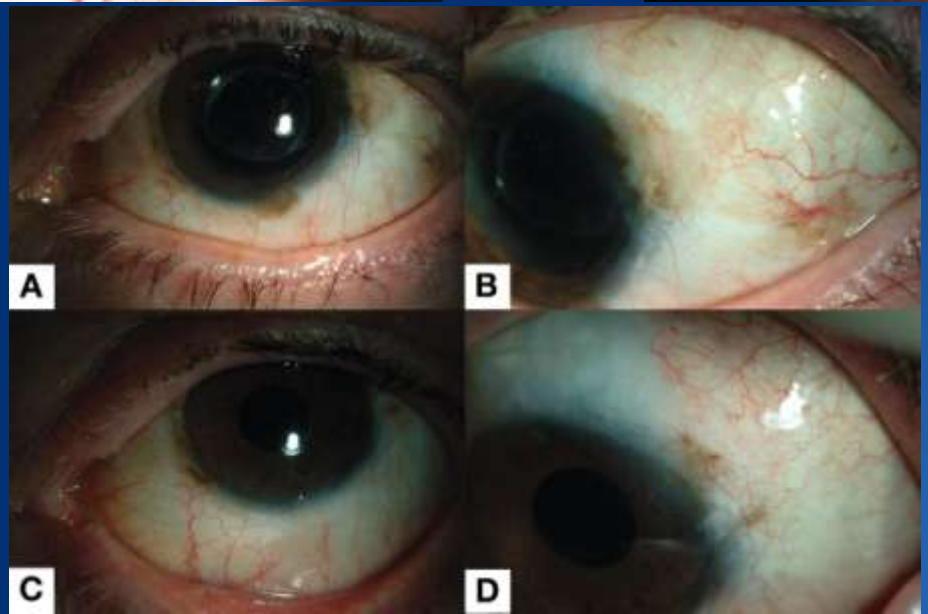
- Unilateral, acquired, light skin, middle age, patchy brown pigmentation or amelanotic (vs racial melanosis vs ocular melanocytosis)
- Risk for malignant transformation-->
More clock-hour extent and atypia (45%)
- May extend to all surrounding structures: cornea, lacrimal system, eyelid, caruncle, etc.

- Tx: similar to SCC (excision +/- MMC, etc)
- Bx: >3 clock hrs, or other relative indications (diameter, thickness, progression, vessels, extent, hx, etc)
- Presence of nodule- remove completely "no touch" approach

Conjunctival Primary Acquired Melanosis (PAM)







Conjunctival Malignant Melanoma

- Arises from PAM 75%, preexisting nevus 20%, de novo 5%

- More common in lighter sun-exposed skin, middle-aged or elderly; but has been seen in African Americans, in fornices/palp conj, and in younger age

- Some assoc'n w/ dysplastic nevus syndrome, xeroderma pigmentosum, neurofibromatosis

- Generally pigmented, fleshy, elevated, near limbus, feeder vessels

- Can metastasize locally and distally: ips. lymph nodes, liver, brain, lung are most common

Conjunctival Malignant Melanoma

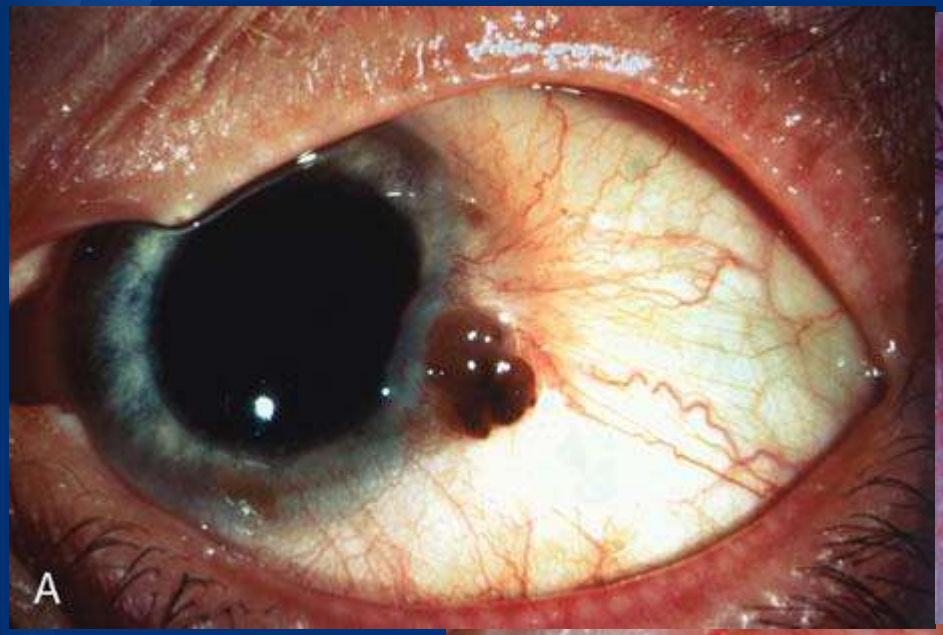
- Tx: complete early excision with aforementioned ancillary techniques; enucleation; exenteration

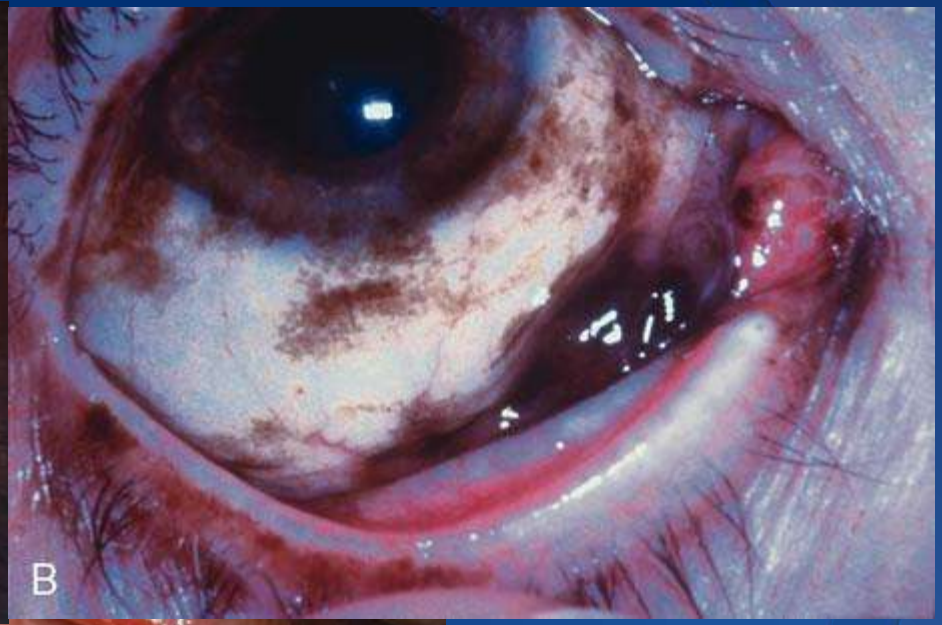
- Recurrent lesion->worse prognosis; check fornices, puncta, orbital rim, lymph nodes at f/u

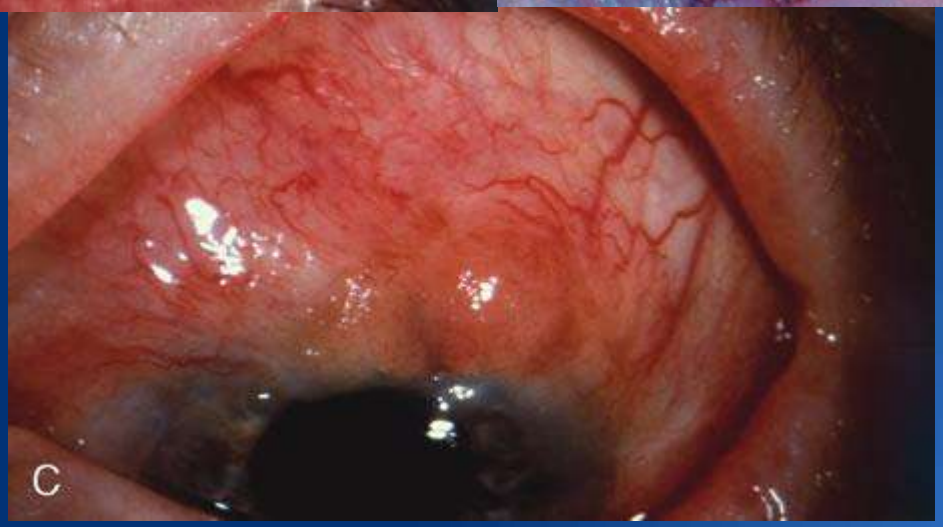
- Prognosis: mortality 25%

- Imitators: pinguecula, pterygium, Axenfeld's nerve loops at the site of a scleral emissarial canal, mascara deposition in the inferior fornix, silver deposition on the entire conjunctival surface in patients who have used Argyrol eye drops, gunpowder deposition in patients exposed to gunpowder explosions, adrenochrome pigment in the inferior fornix in patients using epinephrine eye drops, hemorrhagic conjunctival cyst following previous surgery, pigmented cells trapped within a nonmelanocytic tumor (fellow travelers), ochronosis pigmentation at the site of muscle insertion and in pinguecula in patients with alkaptonuria, and calcified Cogan's scleral plaque at the horizontal rectus muscle insertions in older adults.

Conjunctival Malignant Melanoma







References

1. Duane's Ophthalmology CD-ROM, 2006 edition. Vol 4, ch. 3, 10.