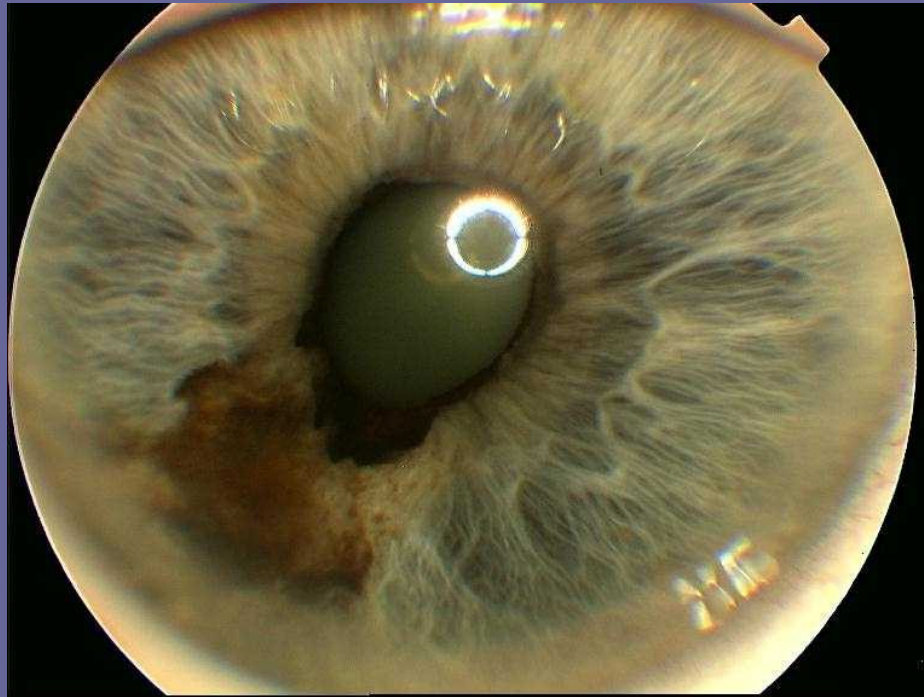


Neoplastic diseases of the eye and adnexa



Tumor tissue change, which is a result of the locally noncontrolable growth of autonomous nature.

The biological nature of the tumor:

benign

malignant

Classification of eye tumors according to anatomic localization:

eyelid tumors

tumors of the eye

orbital tumors

Eyelids tumors

Location:

mainly a cosmetic problem

malposition and dysfunction of the eyelids with symptoms of dry eye syndrome (burning, cutting, more frequent sec. infections, xerosis of the conjunctiva, exposure keratopathy a reduction or even loss of the eye ZO)

Treatment:

(Depending on size, location and nature of the changes)

Early excision with a sufficiently large safety rim
histological verification

Benign eyelids tumors

Location:

anywhere on the lid, without age limitation
mostly a cosmetic problem

Papilloma - cutaneous horns

Verruca, verruca senile

Hemangioma

Nevus



Treatment:

Observation (nevi)

Surgery - cautery, simple excision

Histological examination

Benign eyelids tumors



Retention cyst

Eyelids papiloma



Malignant eyelid tumors

Location:

predilectively lower lid, 6.-7. decade of life

basal cell carcinoma (invasion only local)

squamous cell carcinoma (metastasizes)

malignant melanoma

Meibom glands carcinoma

Treatment:

surgical excision - simple

- with transplant (free or sliding)

radiotherapy

surgery followed by radiotherapy

Oncologic dispensary!

Malignant eyelid tumors

Basal cell carcinoma



Tumors of the conjunctiva and cornea

Location:

all ages, a shift to a higher age

Treatment:

dispensary congenital change without progression -
photographs (cosmetic point of view)

surgical - block excision, lamellar keratectomy,
in malignancies completed with cryotherapy
- radical excision (up orbit exenteration)

additional local radiotherapy

local application of antimetabolites

Histological examination!

Oncological dispensary in melanoma and cancer!

Benign tumors of the conjunctiva and cornea

Congenital:

Choristoma - dermoid, lipodermoid

Hemangioma

Epithelial:

Hyperplasia

Epithelioma (carcinoma in situ, Bowen's disease)

Melanotic:

Melanosis

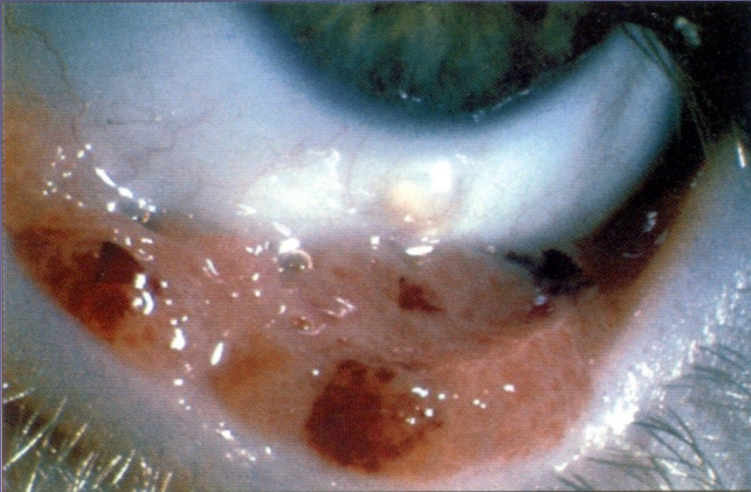
- congenital

- acquired (with or without atypia atypical)

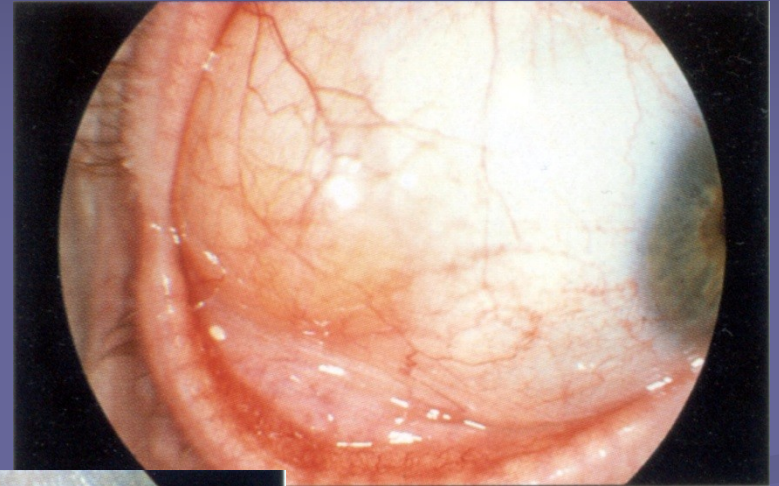
Nevus, Melanocytoma (kong. based)

Benign tumors of the conjunctiva and cornea

conjunctival papiloma



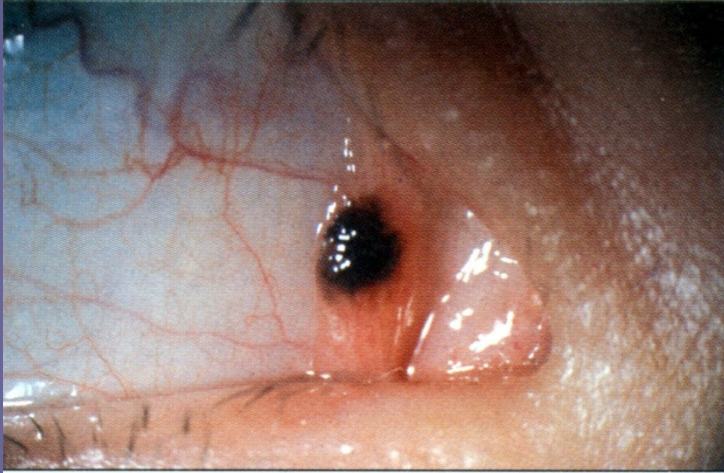
conjunctival lipodermoid



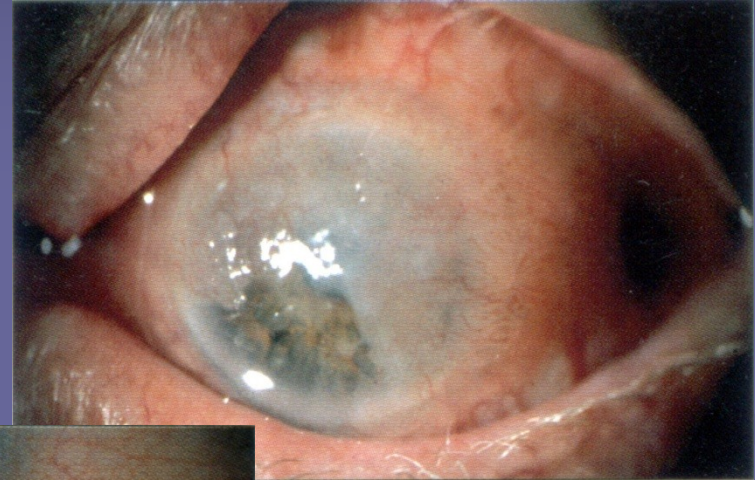
*conjunctival
lymfangioma*

Benign tumors of the conjunctiva and cornea

conjunctival nevus



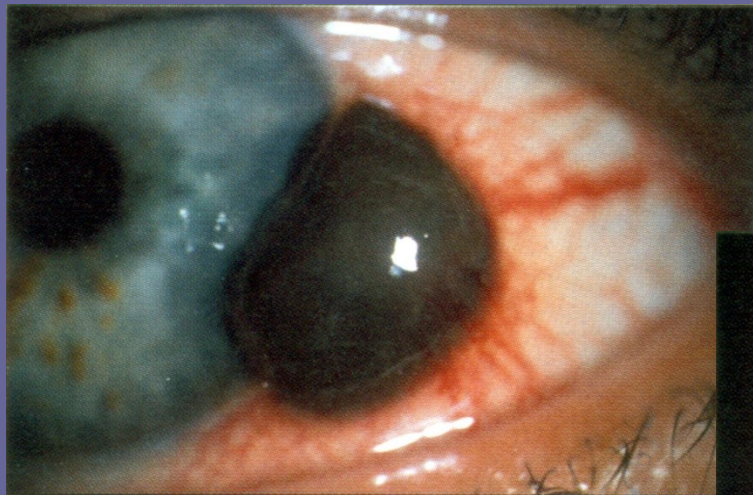
carcinoma in situ



*conjunctival
melanosis*

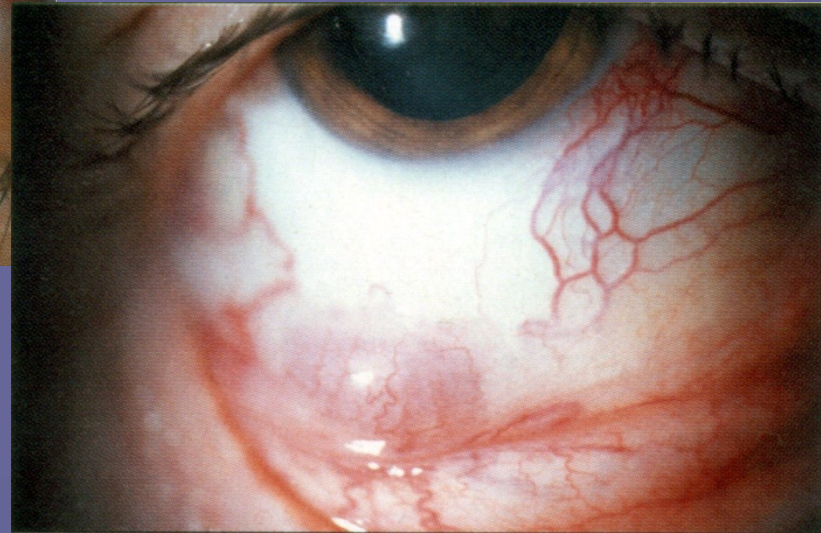
Malignant tumors of the conjunctiva and cornea

- Malignant melanoma of the conjunctiva
- Carcinoma of the conjunctiva (rare disease))
- Lymfoma of the conjunctiva (Non – Hodgkin type)



conjunctival malignant melanoma

conjunctival lymfoma



Intraocular tumors

Primary:

the origin of the uvea (iris, ciliary body, choroid)
originate in the retina

Secondary:

infiltrative growth of surrounding tissue

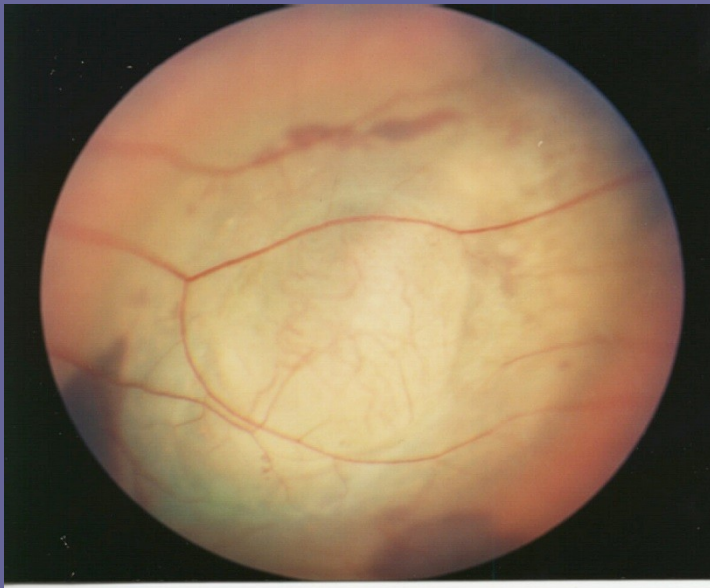
Metastatic:

following generalization of the malignancy
most common in the choroid (often the first symptom of malignancy)

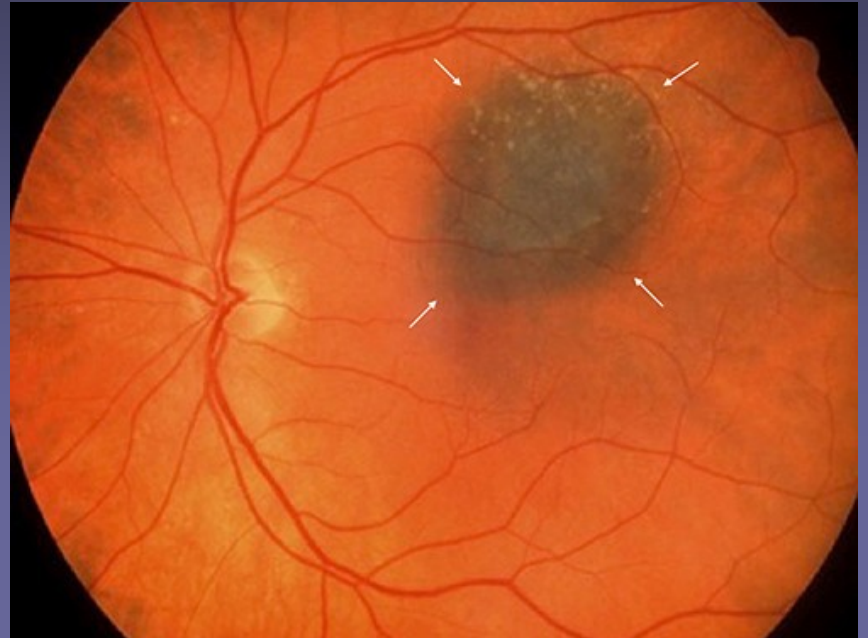
Metastases - women breast carcinoma 85%, bronchi 8%
- male lung carcinoma 38%, GIT 20%

Malignant melanoma of the uvea(MMU)

- Iris 8%
- Ciliary body 12%
- Chorioid 80%



- the most common primary intraocular tumor of adults
- incidence between 50-70 years
- featured mortality 30 -70% most often
- unilateral

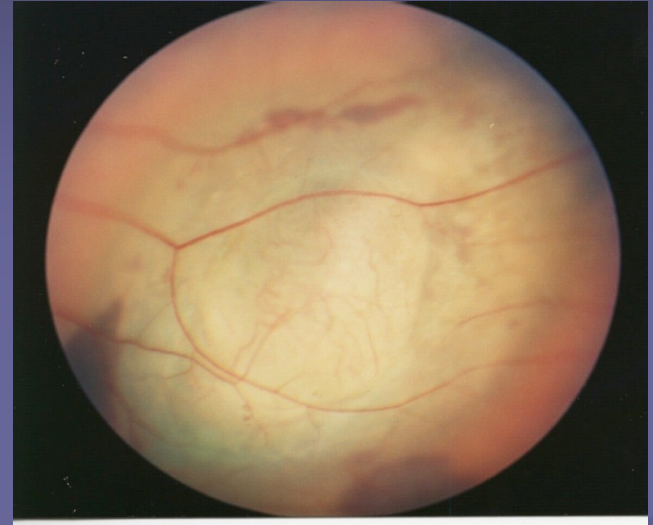


MMU Diagnostics

Examination on the slit lamp

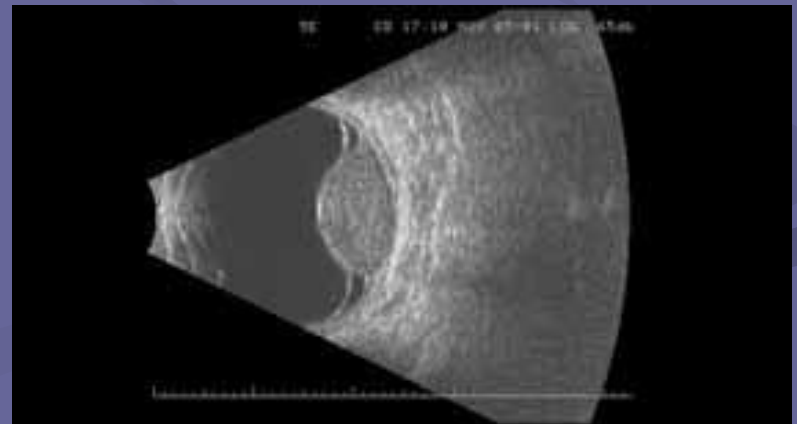
Ophthalmoscopy

- direct
- indirect
- biomicroskopie
- gonioscopy



Sonography

- B scan
- standard. echography
- UBM

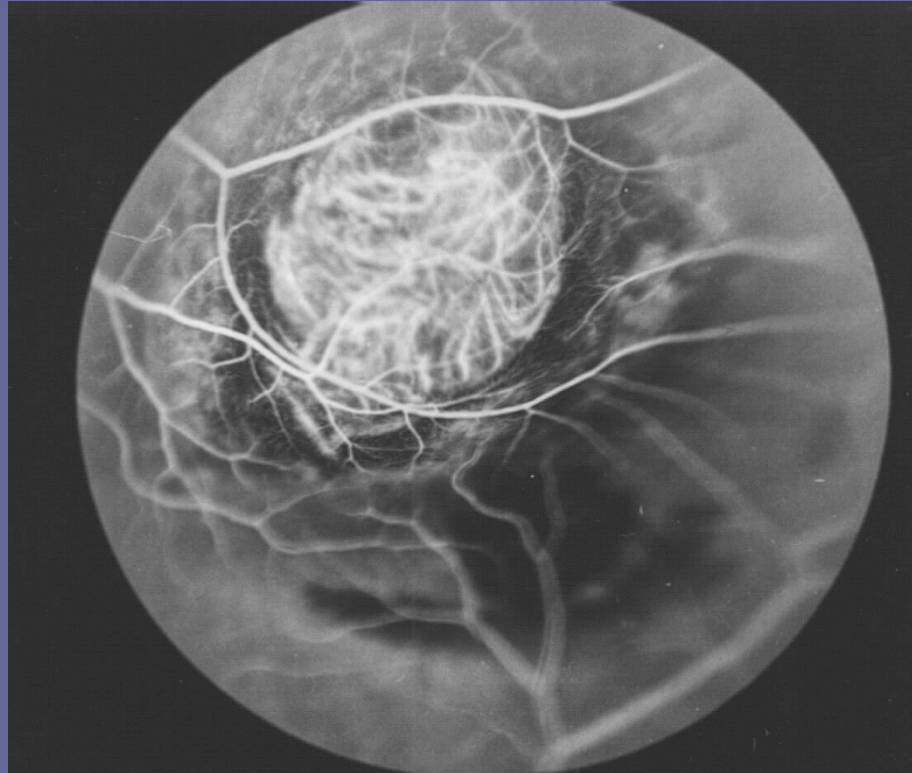


MMU diagnostics

FAG (fluorescein angiography)

ICG (indocyanin angiography)

NMR, PET



Examinations performed in determining the MMU diagnosis

- Compleat laboratory examinations including oncomarkers
- Lungs X ray scans
- Echography of parenchymatous organs of the abdomen
- Brain NMR

- Oncological examination
- (PET)

Therapy of choroidal MM

- Brachytherapy
- Enucleation of the bulb
- Exenteration of the orbit

Brachytherapy

Indication

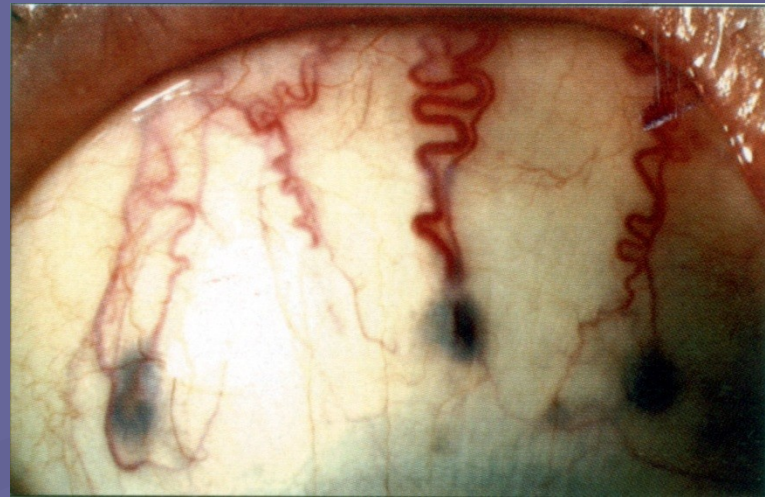
- Height to 10 mm
- Bases to 15 mm

radioactive source ^{106}Ru



Enucleation of the bulb

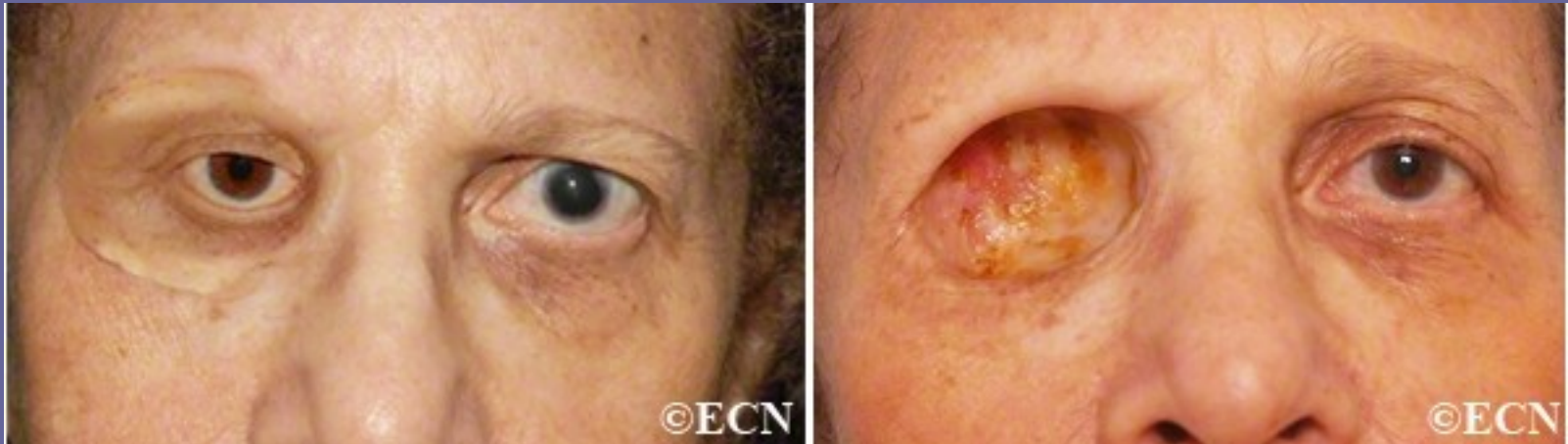
- height above 8-10 mm
- bases above 15 mm
- small range extrabulbar extension
- blind and painful bulbs with secondary glaucoma



Exenteration of the orbit

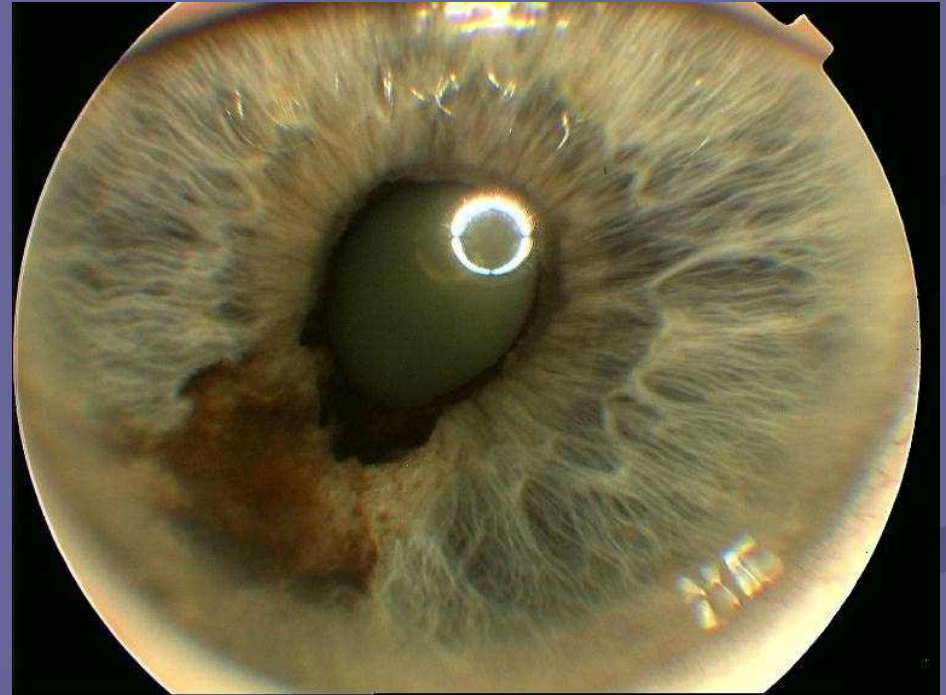
Indications:

- retrobulbar extension of the tumor
- significant peribulbar extension of the tumor



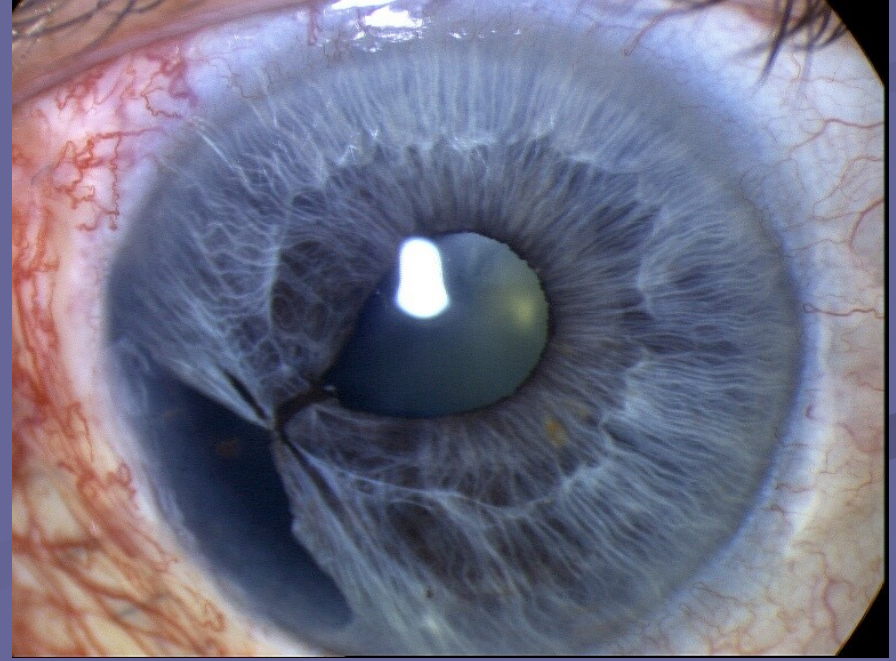
Iris malignant melanoma

- most common occurrence in the lower half of the iris
- various pigment
- distortion of the pupil
- ectopia of pigmented sheet
- partial cataract



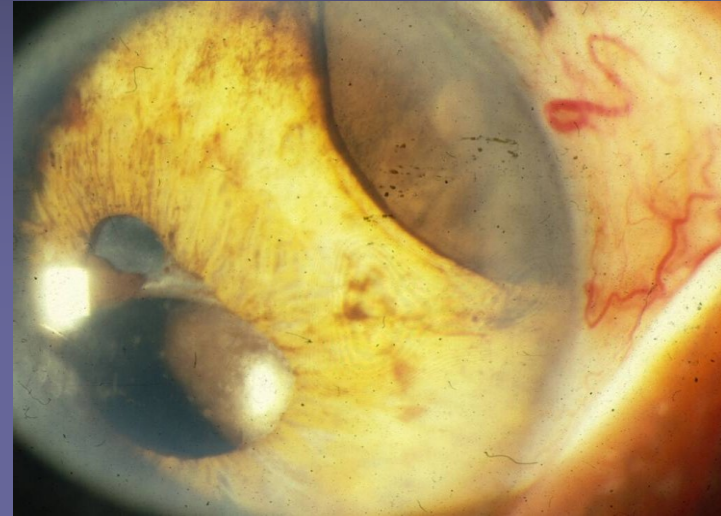
Treatment of benign and malignant lesions of the iris

- monitoring borderline findings (photographs)
- excision - in suspected lesions not overlapping 4 hours
- enucleation of the globe - susp. malignant lesions over 1/2 of the iris, blind bulb, noncorrected secondary glaucoma



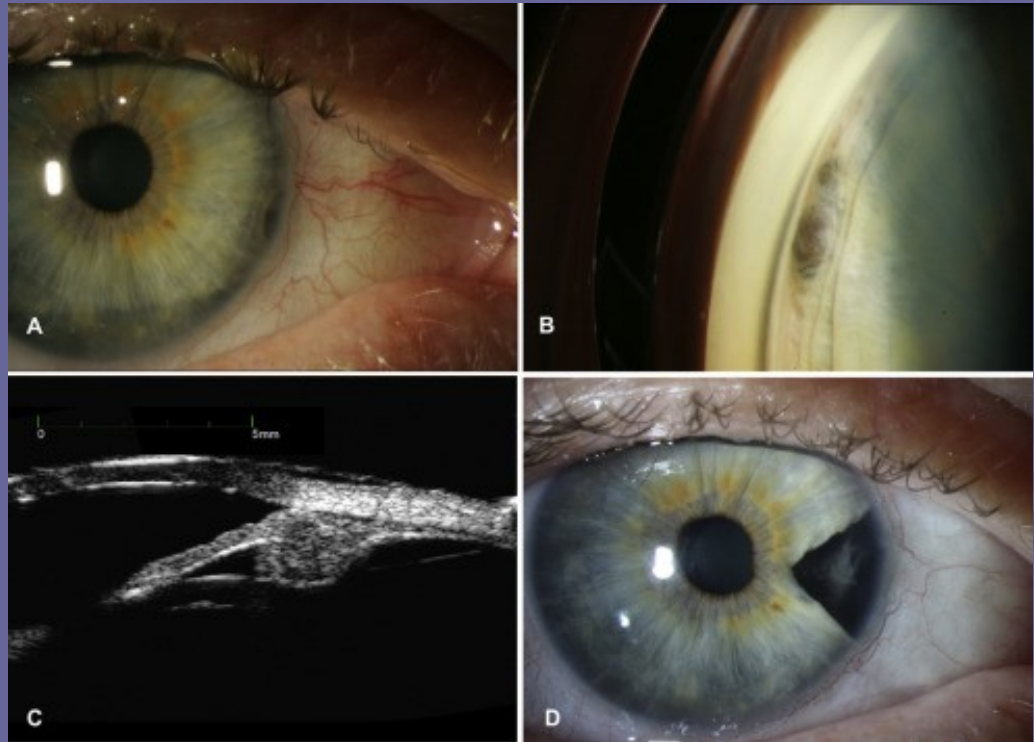
Ciliary body malignant melanoma

- long asymptomatic
- extension episcleral vessels
- pressure on the lens
(astigmatism, partial cataract, subluxation)
- secondary retinal detachment
- iris root erosion
- secondary glaucoma after initial hypotension
- epibulbar meat in place of extrabulbar extension

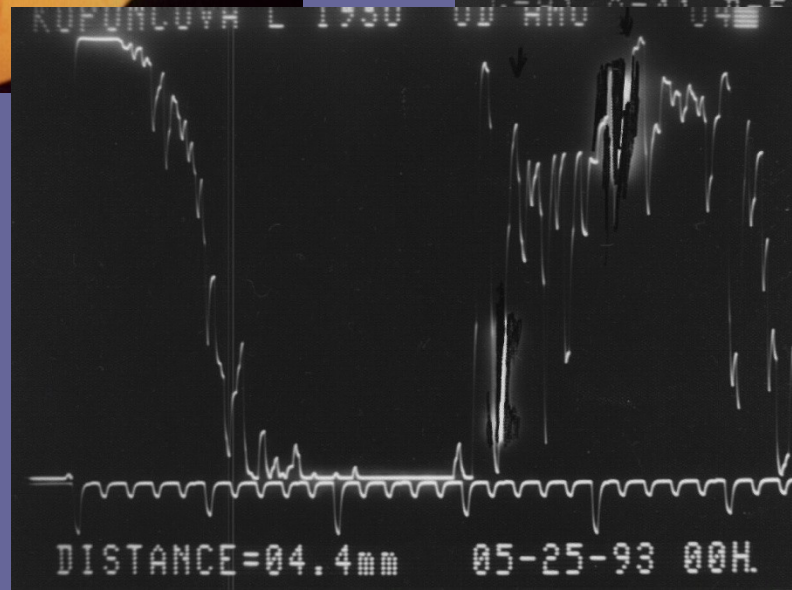
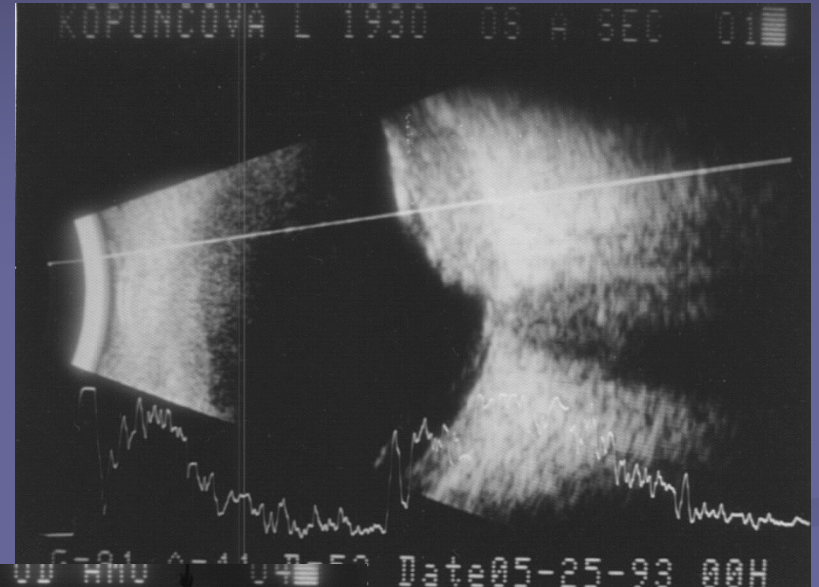
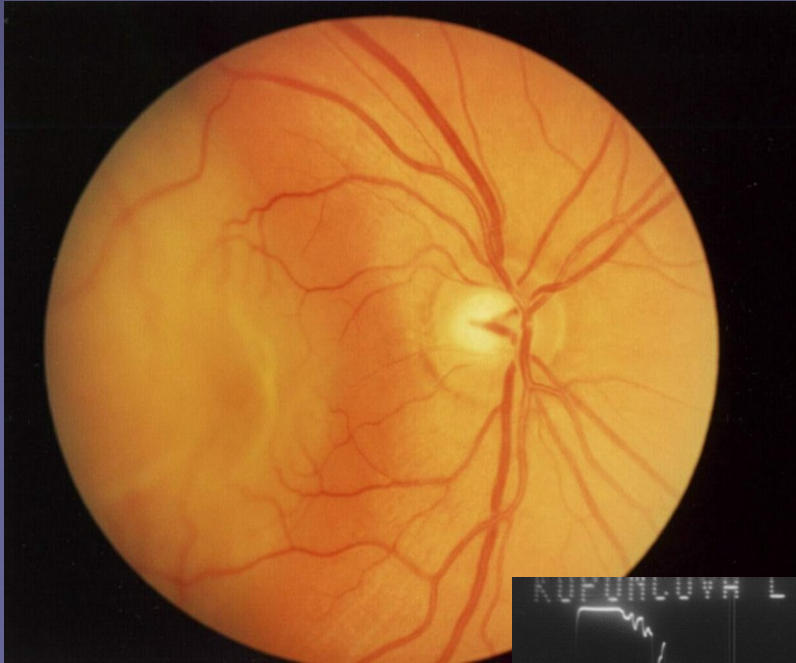


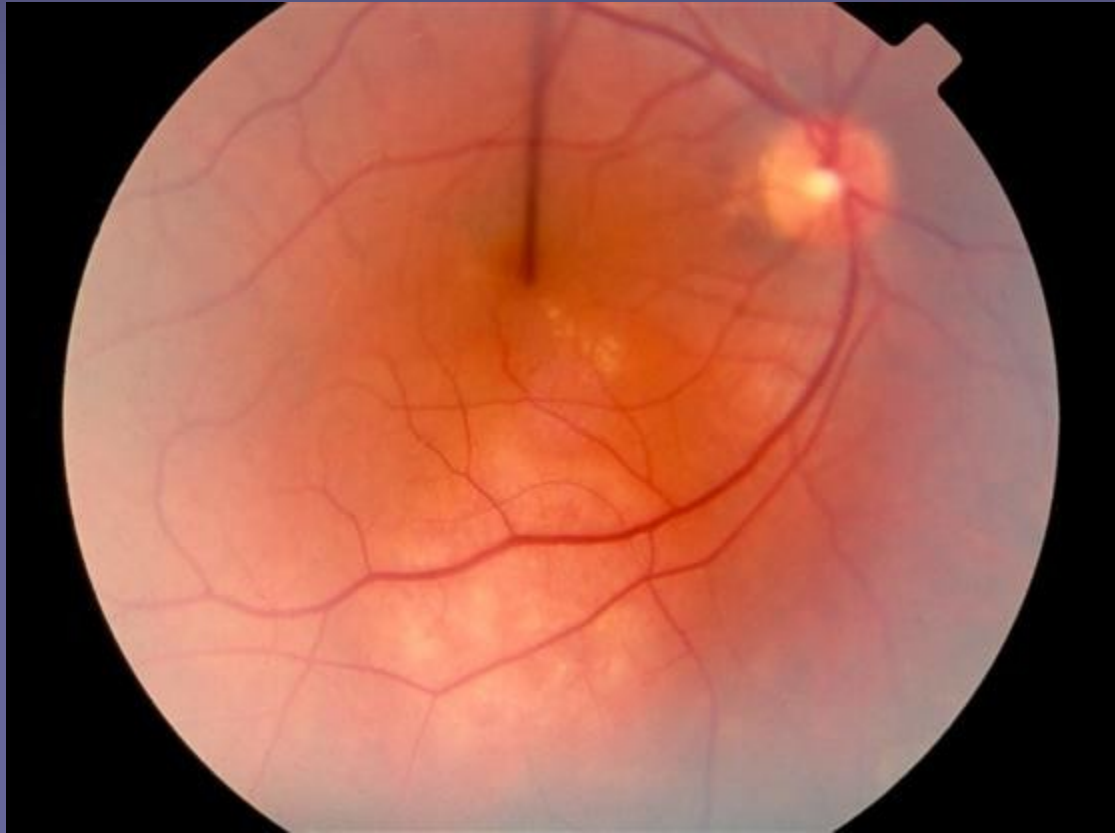
Therapy of ciliary body melanomas

- cyclectomy
- iridocyclectomy
- radiotherapy - brachytherapy
- enucleation

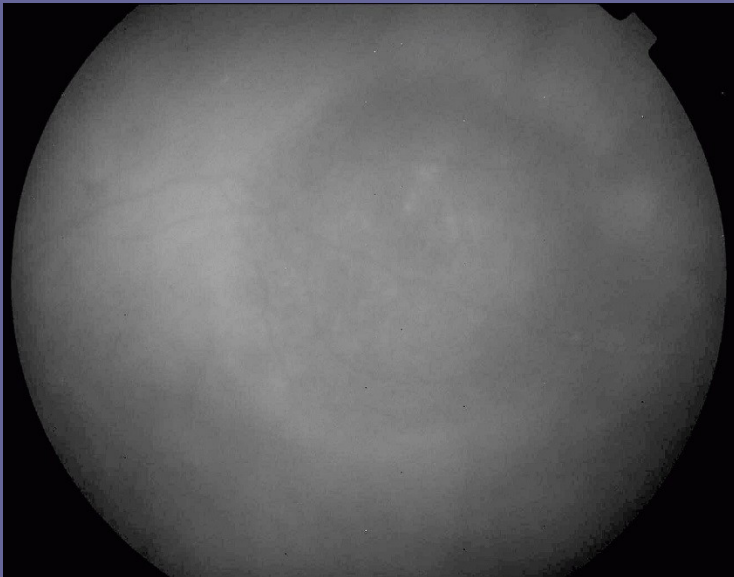
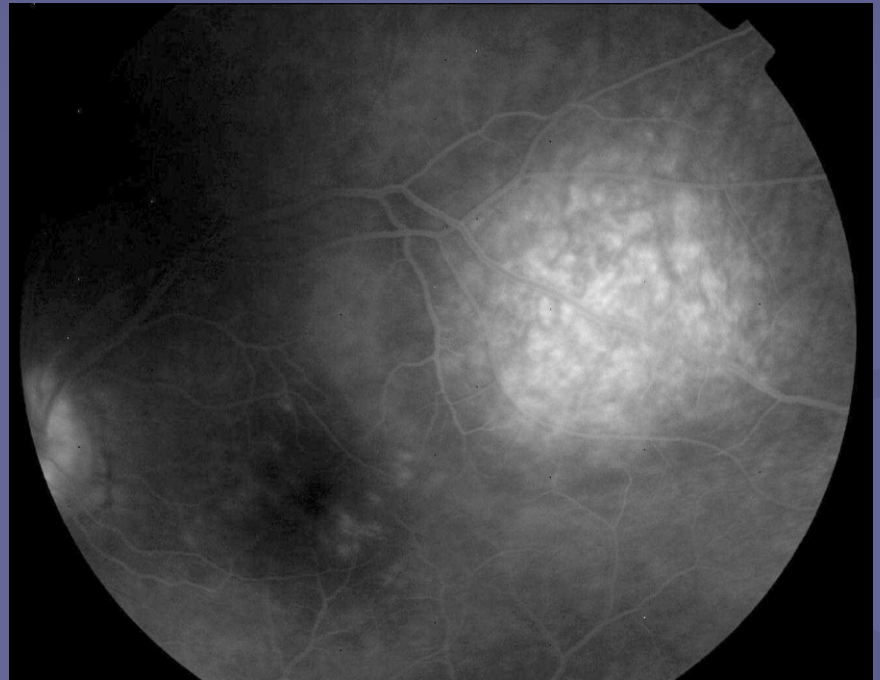
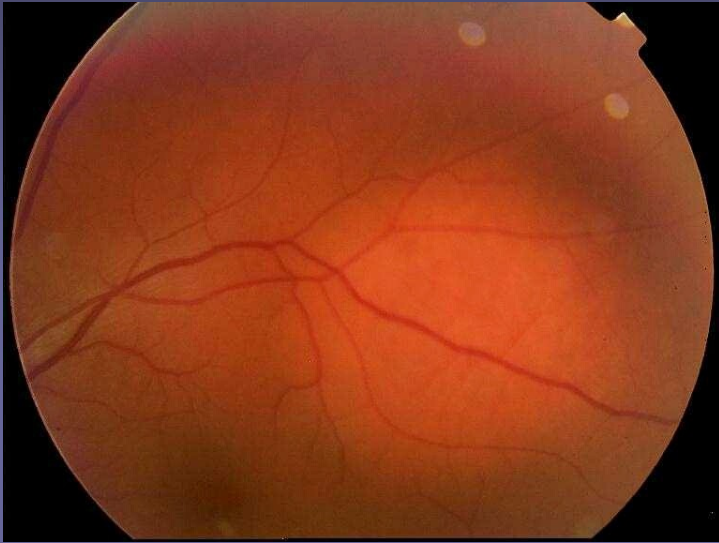


Choroidal metastasis

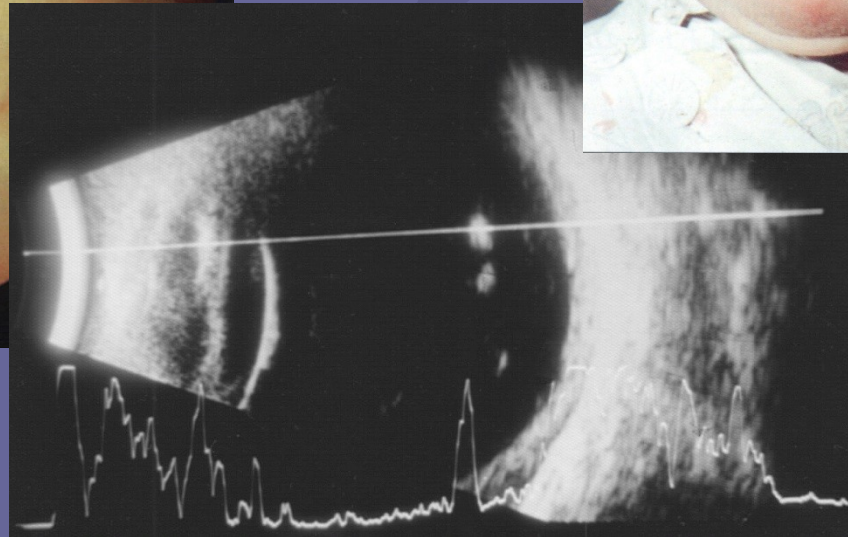
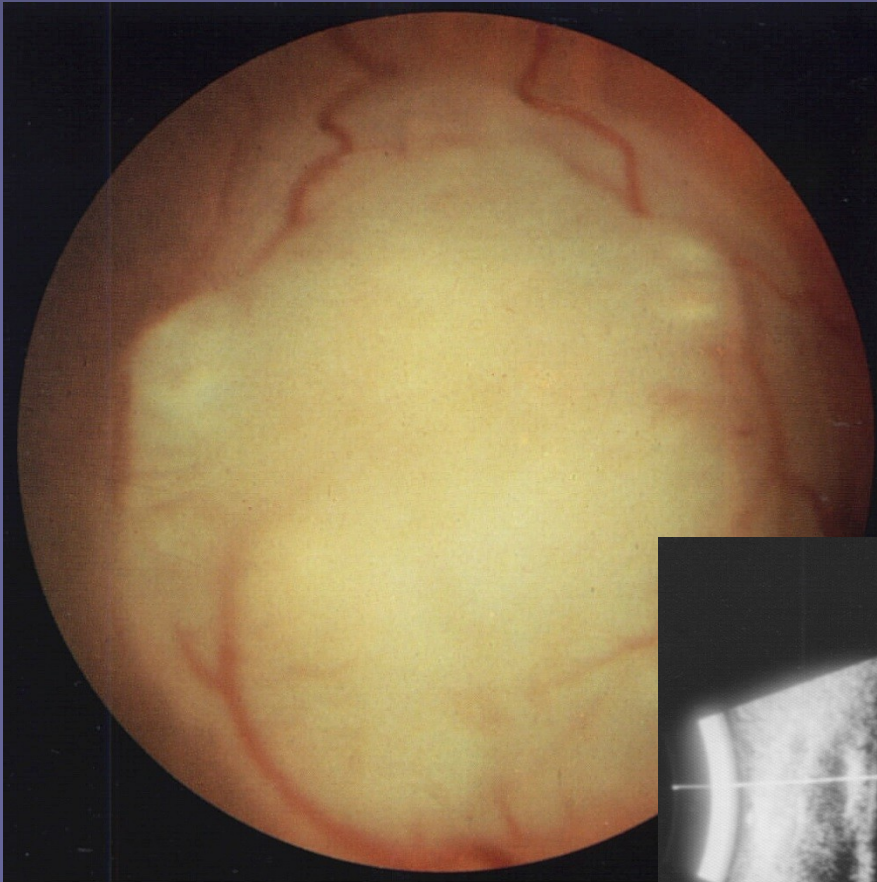




Choroidal hemangioma



Retinoblastoma – most common intraocular tumor in childhood



Tumors of the orbit

Symptoms:

- changes in the position of the eye - the eye protrusion or deviations
- double vision (binocular diplopia)
- eyelid symptoms - edema of the eyelids, drooping of the eyelid
- swelling and redness of the conjunctiva
- pain - a frequent symptom! (from oppression, sec. glaucoma)
- decrease in visual acuity from the oppression of the optic nerve
- visual field changes

Tumors of the orbit - distribution

Primary – primary formation in orbit tissues

- **Benign** - inflammation pseudotumor, vascular – **hemangioma**, lacrimal gland adenoma
- **Malignant** - **primary lymphoma, rhabdomyosarcoma**, meningioma of the optic nerve, lacrimal gland and sac adenocarcinoma

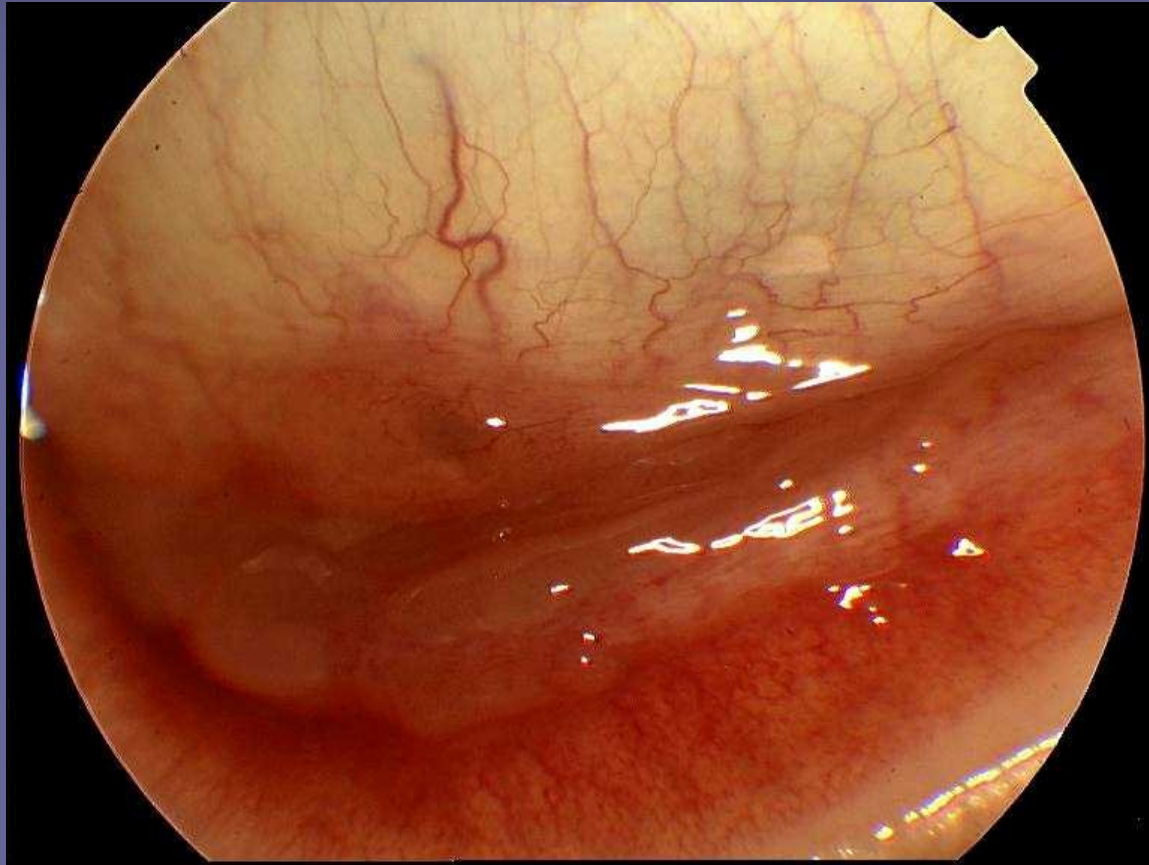
Secondary – ingrowth from sinuses and CNS

- **Benign** - dermoid cysta, mucocele and pyocele
- **Malignant** – sinuses carcinoma , wedge bone meningioma, conjunctival and uveal malignant melanoma, eyelids carcinoma

Metastatic – blood or lymphatic vessels

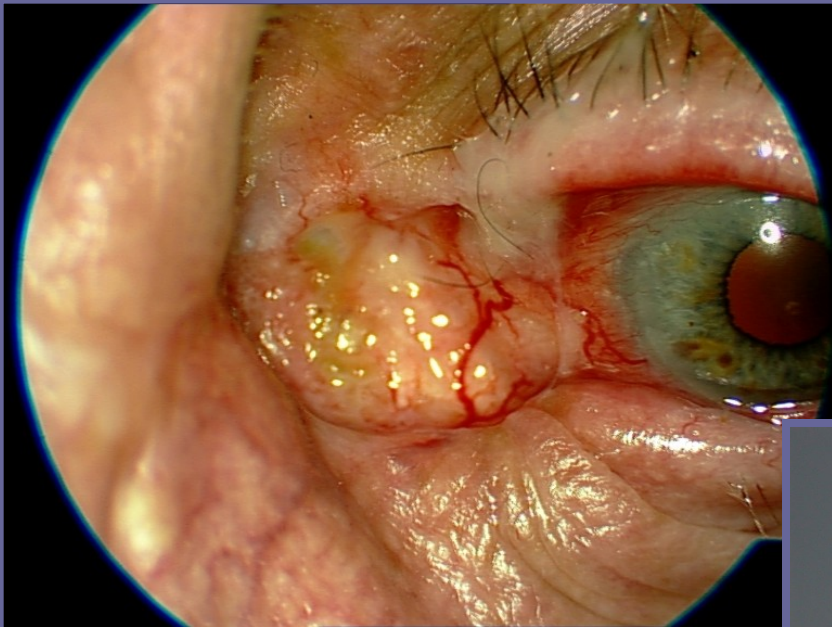
- **always malignant** – bronchogenic carcinoma, breast carcinoma, GIS carcinoma, haemoblastoma

Primary tumors of the orbit



lymfoma of the orbit

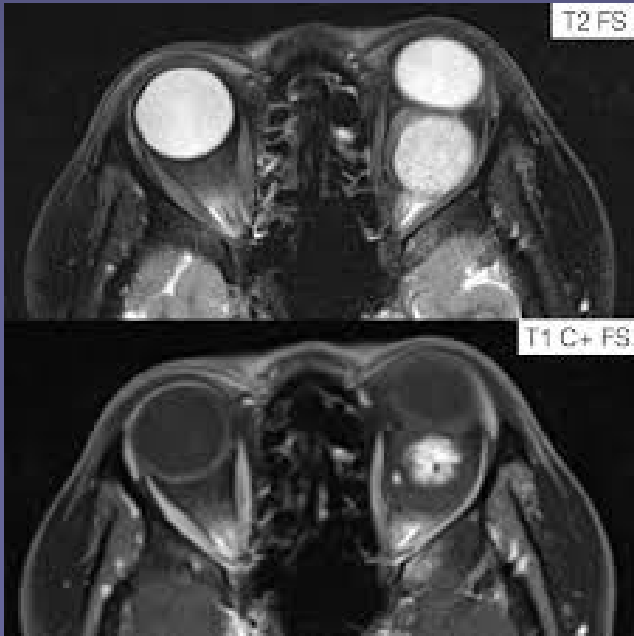
secondary tumors of the orbit



adenocarcinoma of the orbit

bazalioma of the orbit





Metastatic tumors of the orbit



Rhabdomyosarcoma



Diagnostics of orbit tumors

- **Complet ophtalmological examinatin**
- **Radiodiagnostic methods** - RTG, CT, NMR,
Digit. substr. angiografie
(morphology of the lesion in PNS or CNS)
- Biopsy**
- **Interdisciplinary cooperation**

Treatment of oncological diseases of the orbit

Surgery (interdisciplinary cooperation)

- extirpation (boundad lesions)
- extirpation with resection of surrounding structur
- exenteration of the orbit without or with resection of PND

Radiotherapy

- primary (lymfoma of the orbit, pseudotumors)

Combined

- surgery with radiotherapy or chemotherapy

