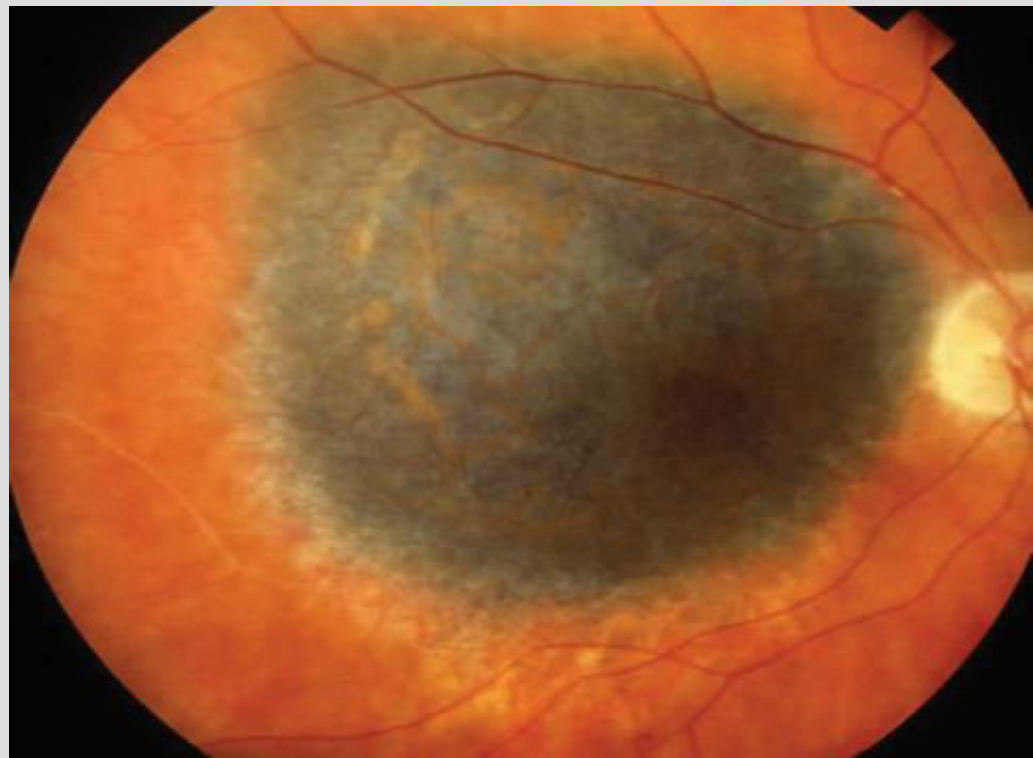


CHOROIDAL MELANOMA

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Choroidal melanoma is the most common primary intraocular malignancy in adults

Accounts for 80% of all uveal melanomas
Six cases per 1million population

Presentation peaks at around the age of 60 years.

Most cases occur sporadically.

PREDISPOSING RISK FACTORS

- fair skin
- lighter iris colour,
- numerous and/or atypical (dysplastic) cutaneous naevi,
- choroidal naevus,

- congenital ocular and oculodermal melanocytosis (naevus of Ota)
- uveal melanocytoma.
- Chronic sunlight exposure and arc welding are environmental risk factors

HISTOPATHOLOGY

- Histopathology reveals spindle and epithelioid cell types

CLASSIFICATION

- Spindle shaped cells
- Epithelioid cells
- Mixed cells

CLASSIFICATION

- Small diameter less than 10mm
- Medium diameter 10 to 15mm
- Large more than 15mm

SPREAD

- Lesions may penetrate Bruch membrane and the retinal pigment epithelium (RPE) with herniation into the subretinal space, classically assuming the shape of a collar stud
- Scleral channel and vortex vein invasion can lead to orbital spread
- Metastasis is commonly to the liver, bone and lung

MORTALITY

- Mortality is up to 50% at 10 years.

SYMPTOMS

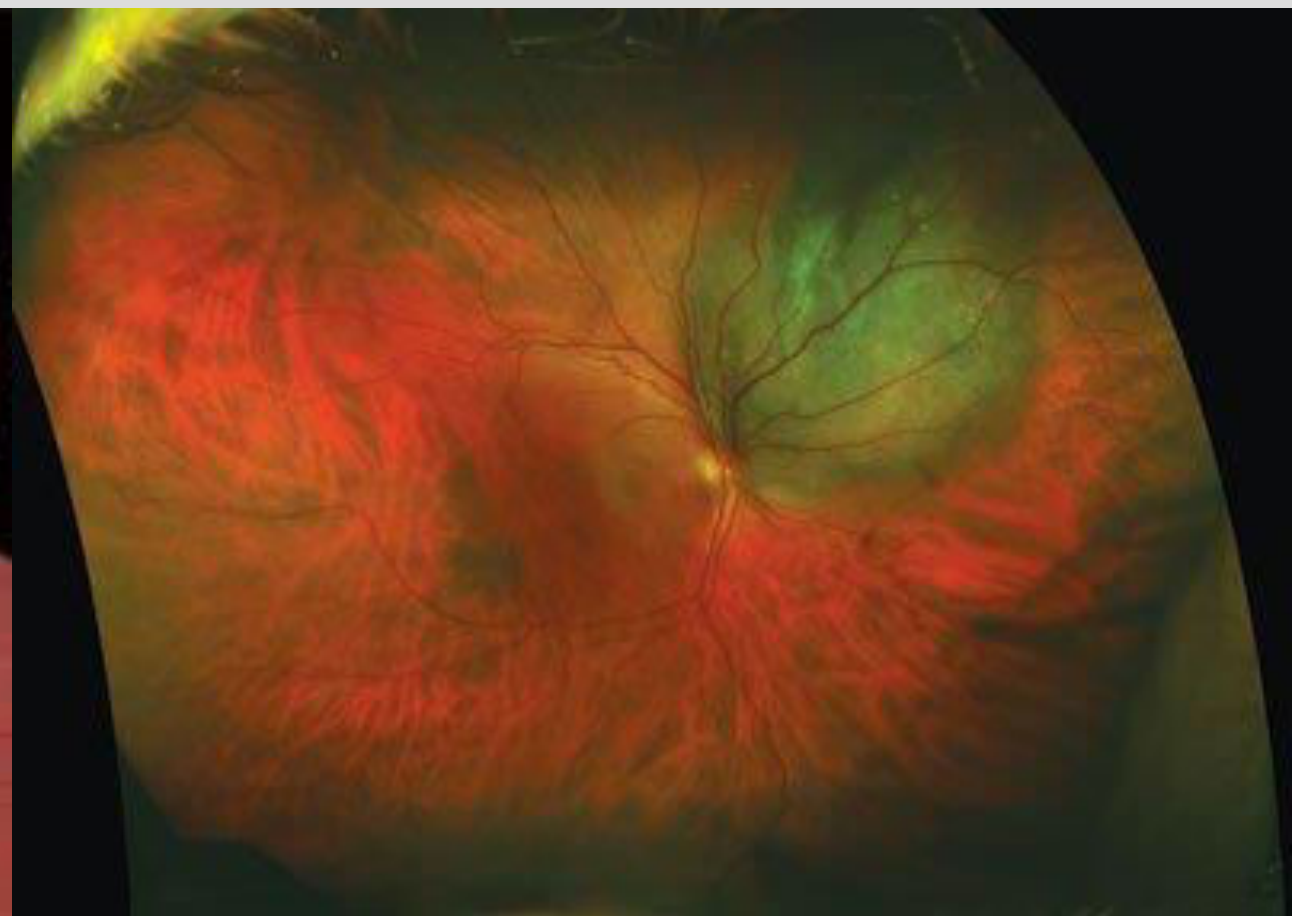
- **Symptoms are often absent, with a tumour detected by chance on routine fundus examination.**
- A range of visual disturbance can occur depending on tumour characteristics.

SIGNS

- A solitary elevated subretinal grey-brown or rarely amelanotic dome-shaped mass.
-
- About 60% are located within 3 mm of the optic disc or fovea.
- Clumps of overlying orange pigment are common

- Associated haemorrhage and subretinal fluid are common
- Other signs can include sentinel vessels, choroidal folds, inflammation, rubeosis iridis, secondary glaucoma and cataract.

Choroidal Melanoma



DIFFERENTIAL DIAGNOSIS

PIGMENTED LESIONS

- Choroidal naevus
- RPE Hypertrophy
- Sub retinal hemmorrhage

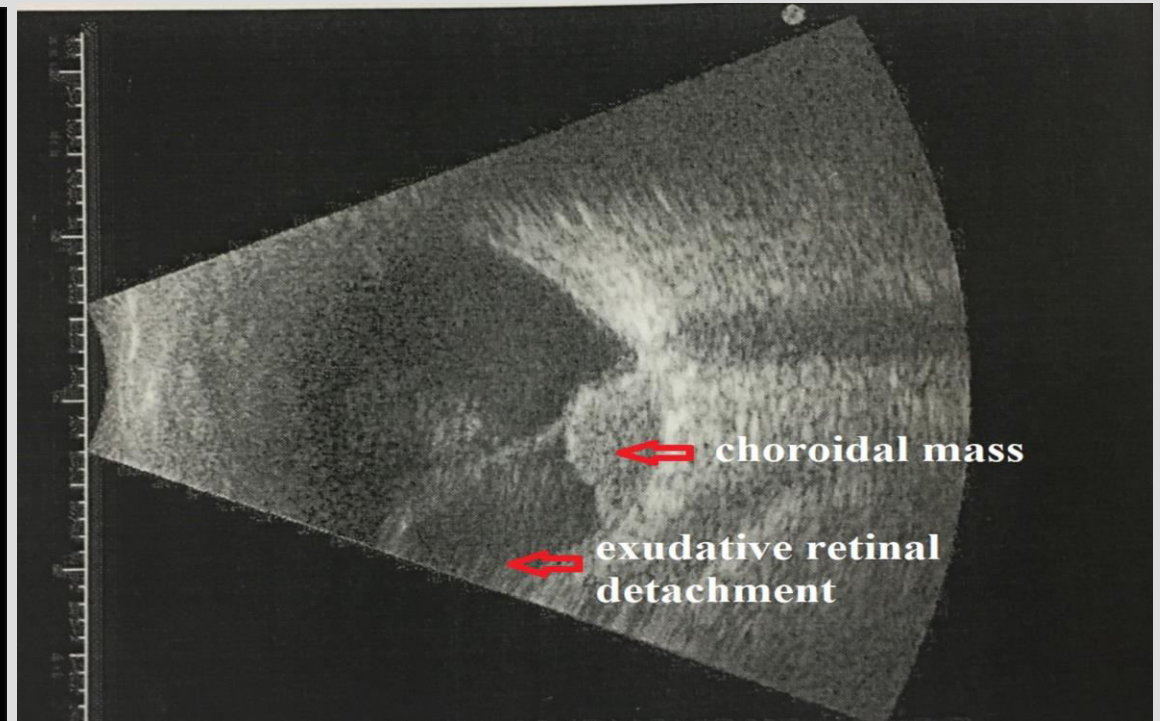
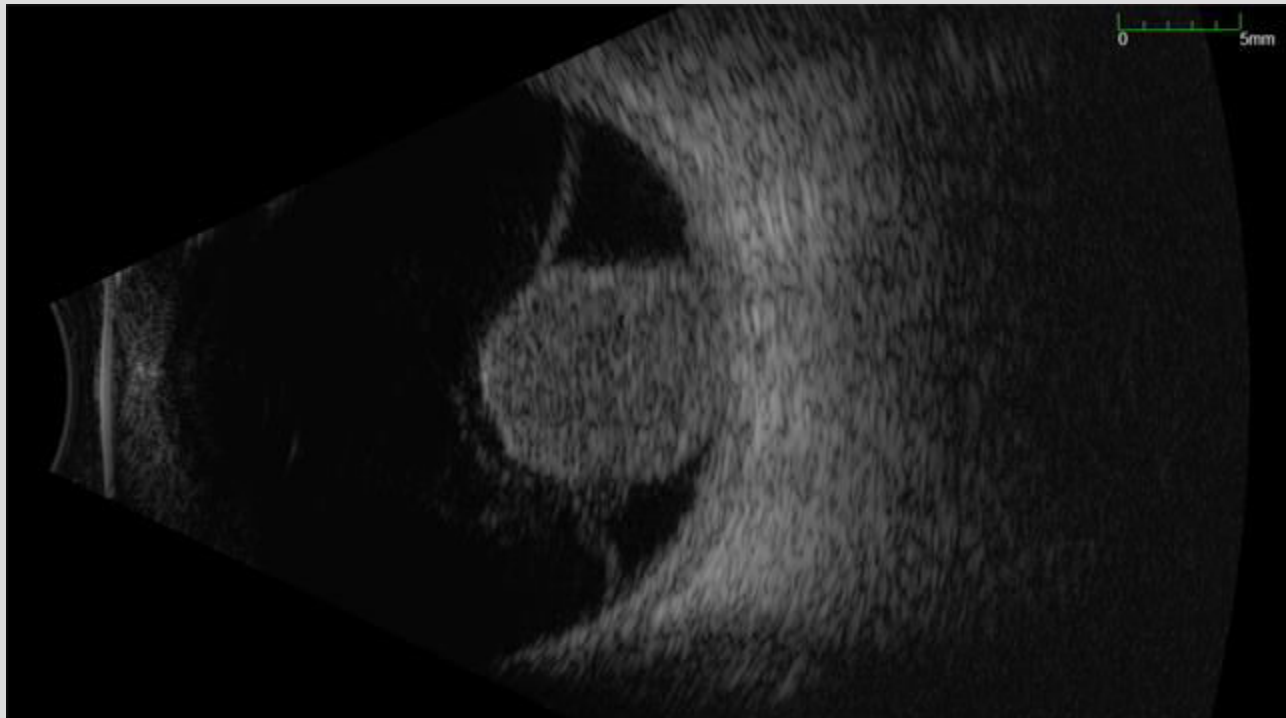
NON PIGMENTED

- Hemangioma
- Granuloma
- metastasis

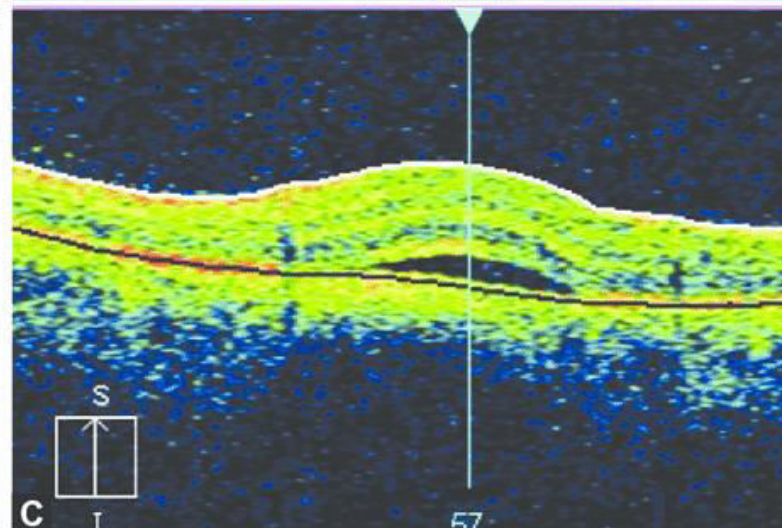
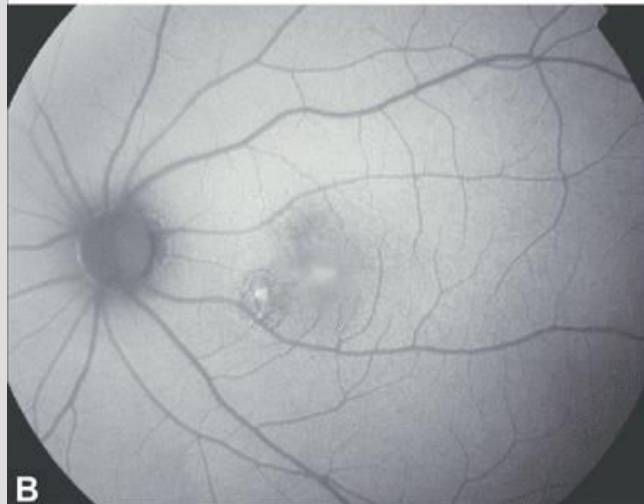
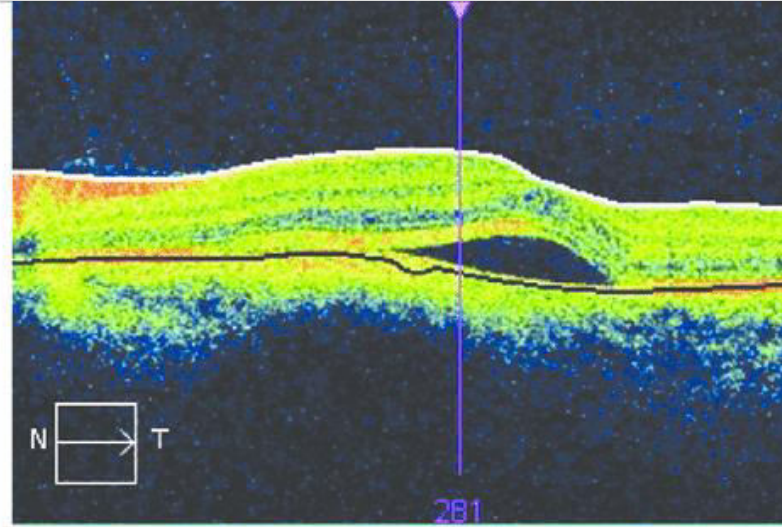
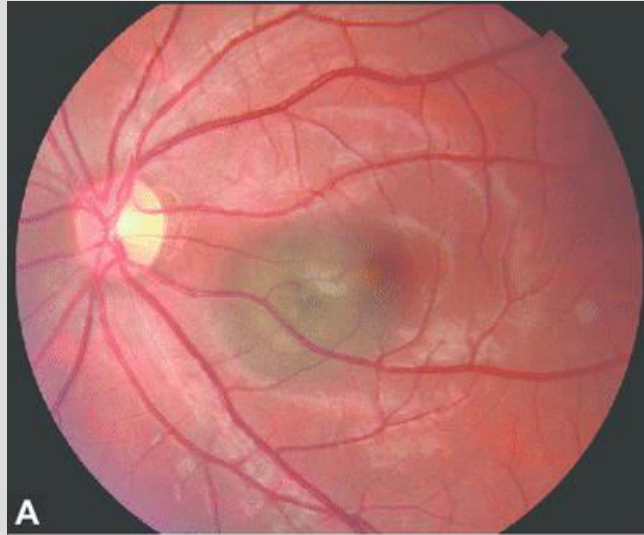
INVESTIGATIONS

- **Examination is sufficient for diagnosis in the majority of cases.**
- **FFA is of limited diagnostic value.** The most common findings are an intrinsic tumour ('dual') circulation
- Pinpoint hyperfluorescence at the apex of tumour.

- **Ultrasound is used to measure lesion dimensions** and to detect tumours through opaque media and exudative retinal detachment and may also demonstrate extraocular extension. The characteristic findings are internal homogeneity with low to medium reflectivity, choroidal excavation and orbital shadowing



OCT



- **Magnetic resonance imaging (MRI)** is useful to demonstrate extraocular extension and may be of some help in differential diagnosis.
- **Biopsy is useful when the diagnosis cannot be established** by less invasive methods. It may be performed either with a fine needle or using the 25-gauge vitrectomy system

- **Genetic tumour analysis** is becoming increasingly important in management, particularly with regard to prognosis, as metastasis occurs almost exclusively with certain genetic profiles
- **Systemic investigation is directed principally towards detecting metastatic spread**

TREATMENT

- Brachytherapy
- External beam radiotherapy
- Trans pupillary thermotherapy
- Transcleral choroidectomy
- Enucleation

Thank You