Summary

Choroidal Melanoma is the most common primary intraocular tumour. It is predominantly a disease of older individuals. lt can metastasize and result in host death.

Choroidal melanoma usually presents as a sessile or dome-shaped pigmented mass located deep to the retina. Secondary retinal detachment frequently occurs. Occasionally choroidal melanomas may be totally or partially nonpigmented. With continued growth a choroidal melanoma can rupture Bruch's membrane and assume a mushroom shape.

Histologically, choroidal melanomas may be composed of spindle A cells, spindle B cells, epithelioid cells, or various combinations of spindle and epithelioid cells (mixed-cell melanoma).

A variety of neoplastic (e.g. choroidal nevus, choroidal hemangioma, choroidal osteoma) and non-neoplastic pigmented choroidal lesions (e.g. choroidal granuloma, choroidal detachment, vitreous hemorrhage) can clinically simulate malignant melanoma of the choroid. The most common simulating lesion is choroidal nevus. The misdiagnosis of these lesions for melanoma has diminished in the recent years due to the development of more reliable diagnostic techniques.

In many cases the diagnosis of choroidal melanoma can be made by slit lamp biomicroscopy or indirect ophthalmoscopy. However, the diagnosis must be confirmed by the use of ancillary studies such as US,FA.,ICGA, CT scanning, MRI, radioactive phosphorus uptake and fine needle aspiration biopsy.

Several methods may be employed in the management of choroidal melanoma depending on the size, location and activity of the tumor. Small melanoma should be observed by fudus photography and ultrasonography.

Radiotherapy can be used in certain ways such as brachytherapy or charged particle irradiation can be used for medium sized melanomas for retaining of useful vision.

Transpupillary thermotherapy can be used for small and medium sized melanomas also using infrared light delivered by diode laser through the pupil.

Photodynamic therapy can be used also as primary treatment modality with application low intensity non thermal light.

Microsurgical resection can be used also either trans-scleral or through endoresection with localized removal of the tumour.

Enucleation still can be done for some selected cases such as large melanomas complicated by secondary glaucoma.

Exentration can be done in massive extraocular extension or recurrence after enucleation.

A recent breakthrough that holds future promise is the discovery of genes that encode tumor antigens. The immune system is able to recognize these antigens and to mobilize effector cells, which can completely eliminate progressive growing tumors.