



## Case Report of Optic Disk Melanocytoma in A 42 Year Old Female

### KEYWORDS

optic disk melanocytoma , polyhedral nevus cells , malignant transformation

### Mohak Sandeep Joshi

Lecturer, D Y Patil Hospital ,  
Kolhapur

### Dr Sonal Gowaikar

Lecturer, D Y Patil Hospital ,  
Kolhapur

### Dr Chintamani Khare

Lecturer, D Y Patil Hospital ,  
Kolhapur

### ABSTRACT

*Melanocytomas are benign melanocytic tumours that typically occur on the surface of the optic disk. These are a group of relatively rare tumours with an unknown rate of prevalence. They are composed of intensely pigmented polyhedral nevus cells. They are usually benign but may undergo malignant transformation and may cause complications like tumour necrosis and vascular occlusions which can lead to the loss of visual function*

### Introduction

Melanocytomas of the optic disk are rare tumours with an unknown rate of prevalence whose clinical course has been limited to a few statistically valid studies(1). Their mean age of diagnosis is between 40 and 50 years with a slightly greater female preponderance. They are generally unilateral. These tumours are mainly confined to the optic disk but may infiltrate the adjacent choroid or may infiltrate the retina showing therefore a filamentous border. They can also induce papilloedema and invade the optic nerve. These lesions are invariably dark brown or black. Their size generally doesn't extend more than 3mm. The adjacent choroids is involved in 47-86% of the cases and retina in 30-67% cases(2). In 25% cases it may reveal papilloedema on fundus examination. 2% of these tumours undergo malignant transformation. This tumour can be accompanied by serous retinal detachment, retinal oedema, lipid deposits and intra retinal haemorrhages. Pigment dispersion in the vitreous secondary to tumour necrosis may be observed and in some cases may extend to the anterior segment.(3,4) 75% of the patients are asymptomatic and tumour is discovered incidentally. Blurred vision, flashes, metamorphosia or micropsia are symptoms most frequently associated.(5,6) Melanocytomas are reported to be associated with ocular melanocytosis, congenital hypertrophy of pigment dispersion, choroidal nevus and retinitis pigmentosa.

Histologically these tumour shows large, deeply pigmented polyhedral or spindle cells with small nuclei.(3,6,7).

### Case history

A 42 year female patient, housewife by occupation and resident of kolhapur came to our opd with complaints of generalized headache which had no aggravating or relieving factors. She had no h/o sinusitis, rhinitis or migraine. No h/o of any surgical intervention. There were no significant findings on her systemic examination. She was not a diabetic or a hypertensive. Her ophthalmic examination showed distant vision on snellens chart was 6/6 and near vision with +1 addition was N6 and anterior segment examination on slit lamp did not reveal any significant abnormality. In the left eye On funduscopy a dark black elevated lesion with well defined margins supero temporal to the optic disk seen. Macula and the peripheral retina was normal. A fundus photograph was taken. B scan ultrasonography revealed a small focal lesion near her optic nerve attachment and perimetry findings revealed a sco-

toma in her infero nasal quadrant. Right eye fundus was within normal limits

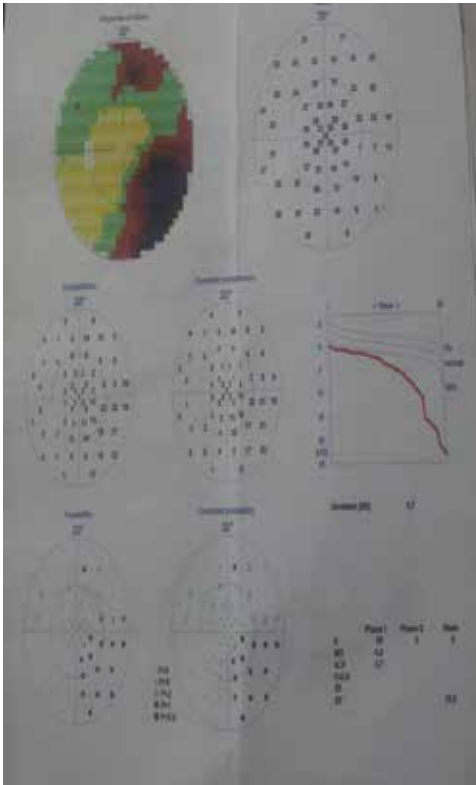
### Conclusion :

Even though the patient came with complaints of headache our meticulous examination revealed a optic disk melanocytoma in the left eye which even though benign in nature can in future undergo malignant transformation leading to irreversible visual loss and hence a yearly follow up was advised.

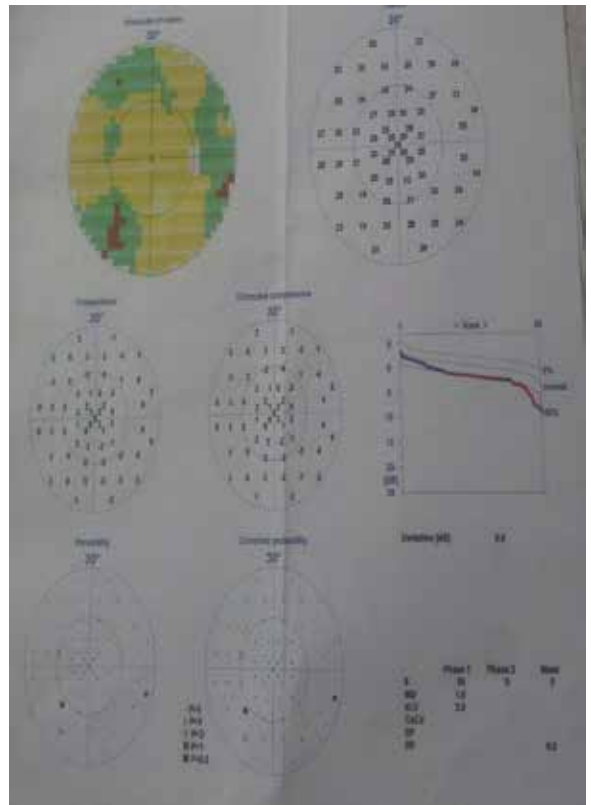
### Fundus photograph showing optic disc melanocytoma of the left eye



### perimetry of the left eye showing scotoma in the infero nasal quadrant



perimetry of the right eye showing no defect in the visual field



bscan of the left eye showing hyperechoic focal lesion at the level of the optic nerve



REFERENCE

1 shields JA, Demirci H ,Mashayekhi A,Shields CL : melanocytoma of optic disc in 115 cases :the 2004 samuel Johnson memorial lecture part 1.ophthalmology 2004;111:1739 | 2 Zografos L, othenion-girard CB , Desjardins L , et al : Melanocytomas of optic disk. Am J ophthalmol 2004;138:964 | | 3 Demirci H,Shields CL ,Shields JA :Bilateral optic disk melanocytoma in a 10 month old infant . Am J ophthalmol 2004;137:208 | | 4 Barlett HM , Willoughby B,Mandava N:polypoidal choroidal vasculopathy in a patient with melanocytoma of the optic nerve. Retina 2001;21:396 | | 5 ERZURUM sa ,Jampol LM , Territto C, O'Grandy R: primary malignant melanoma of the optic nerve simulating a melanocytoma.Arch ophthalmol;| 1992;110:684 | | 6 Agarwal s,Shanmugam MP,Gopal L,et al:necrotic melanocytoma of the optic disk with central retinal vascular obstruction.Retina 2005;25:364. |