



ORIGINAL RESEARCH PAPER

Ophthalmology

A CASE REPORT ON VISUAL OUTCOME IN PURTSCHER'S RETINOPATHY AFTER HIGH DOSE OF STEROIDS

KEY WORDS: Purtscher Retinopathy, Blindness, Steroid, Visual Outcomes

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ABSTRACT

Purtscher retinopathy is a hemorrhagic and vasoocclusive vasculopathy, which is described as a syndrome of sudden blindness associated with severe injury. We report a 35 year old male patient presented with bilateral painless diminution of vision since 10 days following road traffic accident who was treated by high dose steroid which produced satisfactory visual outcomes.

INTRODUCTION

It is described as a hemorrhagic and occlusive vasculopathy.. In 1912 it was first described as syndrome of sudden blindness associated with severe head injury. . It is described as Chorioretinopathy associated with indirect ocular trauma, non ocular injury, associated with constellation of Retinal findings including Cotton wool spots, Retinal h'ges, Optic disc oedema and Purtscher flecken(area of inner retinal whitening)

When typical finding occurs in absence of trauma, the term Purtscher like retinopathy is used. In this diminished visual acuity is usually accompanied by visual field loss, either in the form of central, paracentral or arcuate scotoma, while peripheral visual field is usually preserved. Exact Pathophysiology remains controversial. Most accepted mechanism is Leukoembolization that causes arterial occlusion and infarction of the microvascular bed. Leukocyte aggregation, which is induced by complement C5a, is believed to be the most likely mechanism of embolization. It is shown to be associated with trauma (Long bone fracture, Traumatic Chest Compression, Head injury, Acute Pancreatitis, Vasculitic Diseases.

CASE REPORT

A 35 year old male patient presented with bilateral painless diminution of vision since 10 days following road traffic accident. He was operated for fracture of Right proximal tibia 8 days back. In this case, complete ophthalmological examination was performed, including BCVA(best corrected visual acuity), slit lamp biomicroscopy, fundus examination, and visual field testing.

On examination visual acuity was reduced to Finger counting-close to face. Fundus examination showed retinal oedema located predominately around optic disc, cotton wool spots, retinal hemorrhages and purtscher's fleckens.

After getting clearance from medicine department patient was given i.v Methyl Prednisolone 1gm TDS for 3 days. Then tapered on oral prednisolone tablets. Visual acuity improved to finger counting 6/12 one month later. However a central scotoma persisted.

TABLE – 1 OCULAR EXAMINATION

	OD	OS
Visual Acuity	Finger counting 2mt	Hand movement close to face
Extra Ocular Movements	Normal	Normal
Slit lamp examn.	Normal	Normal

TABLE – 2 DILATED FUNDUS EXAMINATION

	OD	OS
Media	Clear	Clear
Disc	Normal in S,S,C,M	Normal in S,S,C,M, splinter hemorrhage
Vessels	Dilated, tortuous	Dilated, tortuous
Back ground	multiple flame shape h'ge, cotton wool spots, purtscher flecken	multiple flame shape h'ge, cotton wool spots, purtscher fleckens

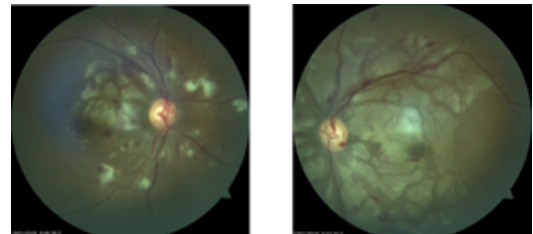
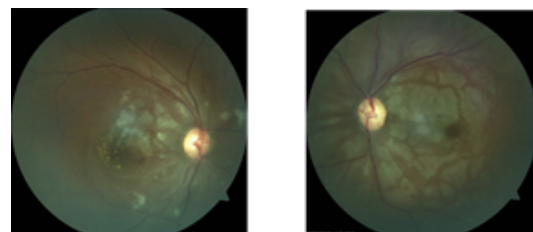


TABLE – 3 OCULAR EXAMINATION AFTER 4 WEEKS

	OD	OS
Visual Acuity	6/9	3 mtr
Extra Ocular Movements	Normal	Normal
Slit lamp examn.	Normal	Normal

TABLE – 2 DILATED FUNDUS EXAMINATION AFTER 4 WEEKS

	OD	OS
Media	Clear	Clear
Disc	Normal in S,S,C,M	Normal in S,S,C,M, splinter hemorrhage
Vessels	Normal	Normal
Back ground	few flame shape h'ge, cotton wool spots, purtscher fleckens	few flame shape h'ge, cotton wool spots, purtscher fleckens



CONCLUSIONS

Treatment with systemic high dose steroid therapy improves visual outcome in some patient but at present there is little evidence to support. But in my patient there was satisfactory visual outcome after steroid therapy. Although central scotoma persisted.

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