



CASE REPORT

AN AYURVEDIC APPROACH TO STARGARDT'S MACULAR DEGENERATION: A SPECIAL CASE REPORT

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SUMMARY:

Stargardt's disease is a most common form of inherited juvenile macular degeneration. It usually affects children & young adults in their 1st and 2nd decade of life, even though visual impairment may not be apparent until 3rd decade. The estimated prevalence is 1 in 10,000 population¹. Visual acuity including colour vision testing, visual field analysis, ERG, FFA, Amsler grid charting are the useful diagnostic techniques for this disease. Even though significant research is taking place in this area, no treatment is available till date for this disease in contemporary science. In Ayurveda by considering the visual disturbance & field defect, this disease can be included under dristigata rogas explained by Acharya Sushruta, Pitta vidagdha dusti is one among them, which holds more appropriate to define this clinical condition. As there is no common line of management following in these types of diseases in Ayurveda, an attempt has been made to explain the case treated as per the Ayurvedic principles. This study describes a 25 year old female patient diagnosed as Stargardt's macular degeneration & underwent Ayurvedic treatment protocol i.e Tailadhara with Balashwagandha taila, Nasya with KB 101, Tarpana with Jeevantiyadi ghrita followed by putapaka and internally saptamrita loha was administered. By executing Ayurvedic treatment the quality of the vision distant & near acuity is improved. The treatment adopted in this case can be taken as guidelines to manage the macular degenerative diseases which need extensive management to tackle the pathology.

Key Words: Stargardt's disease, Dristigata rogas, Pitta vidagdha dusti

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INTRODUCTION:

Stargardt's disease is inherited as an autosomal recessive trait, which is severe form of macular degeneration that starts late in childhood. Stargardt's disease turns into macular degeneration, and it will eventually lead to legal blindness⁴. This is different from macular degeneration found in older people as it does not generally lead to blindness. Stargardt's disease was first diagnosed in 1901 by Karl Stargardt, a German ophthalmologist.²

CASE HISTORY: A moderately built female patient aged 25 years came to Shalakyta tantra

OPD of Government Ayurveda Medical College, Bengaluru with chief complaint of diminished distant and near vision in both eyes. She is also complained of glare during night driving and distortion of images especially during reading. Patient was diagnosed case of bilateral macular dystrophy previously. Patient gave a history of progressive loss of vision in both eyes and using glasses for that since 16 years of age.

Examination:

Table no.1: Visual acuity of case

Visual acuity	Unaided Distant		Aided Distant		Unaided Near vision	
	OD	OS	OD	OS	OD	OS
	4/60	4/60	6/60	6/60	N8	N10

On ophthalmoscope examination on 04-07-17 revealed degenerated macula with beaten bronze appearance with temporal pallor of optic disc bilaterally. On Amsler grid charting, central area was missing.

Investigations: FFA was done and showed 'dark choroid effect' in macular area in both eyes; all these are the characteristic features of Stargardt's disease.³

Treatment History:

Table 2: Showing Summary of the treatment given to the Patient

No of Days	treatment	medicine	Dose and time	duration
1-7	Tailadhara	Balashwagandha taila	45 minutes	07 days
8-14	Marsha nasya	Ksheerabala taila 101	10 drops each nostril	07 days
15-19	Tarpana	Jeevantiyadi ghrita	15 -20 minutes	05days
20	Putapaka	Jeevaniyagana &	10 minutes	01 day

		Ajamamsa rasa		
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Total treatment period is 20 days and for every 15 days follow up.

During follow up: Pratimarsha nasya, Ghrita aschyotana and Saptamrita loha was given internally for 48 days.

OBSERVATION AND RESULTS:

During the last four months, the visual acuity was not deteriorated and patient felt more clarity of vision with slight improvement in the distant and near vision. The patient is using the computers without eye strain and the glare is relieved significantly.

Table 3: Effect of therapy on Visual Acuity

Investigation		Unaided distant		Aided Distant		Unaided Near Vision		Aided Near Vision	
Visual Acuity		OD	OS	OD	OS	OD	OS	OD	OS
	BT	4/60	4/60	6/60	6/60	N8	N10	N8	N8
	AT	6/60	6/60	6/36	6/24(P)	N8	N8	N8	N8
	After Followup	6/60	6/60	6/36	6/24	N8	N8	N8	N6(P)

DISCUSSION

By considering the pathophysiology and clinical features of Stargardt's macular degeneration, it can be considered as a Drishtiroga in which utmost vitiation of Alochaka pitta. The Samprapthi and clinical features of Pittavidagdha drishti^{5,6} is most suitable to understand this dangerous degenerative disease. Involvement of Sapthadhatu along with Vata-Pitta vitiation is the undergoing pathology in this case and Thrithiya patala is the site of lesion which is suddenly progressing to Chaturtha patala causing marked reduction of vision. Age of manifestation of the disease also points

towards the role of Pitta in the disease process.

While dealing such a chronic degenerative disease, ultimate line of management should be Vatapitta shamana and Rasayana. Tailadhara has a special role here because Pranavayu plays a key role for the stimulation of Chakshurindriya. Balashwagandha taila is selected for its Brimhana action. For Nasya purpose Ksheerabala taila 101 was selected which has the affirmative effect of Vata-Pitta shamana and Indriyatarpana. For the purpose of Tarpana, Jeevantiyadi ghrita is used due to its Vatapittahara and Jeevaneeya action.

During follow-up period, Pratimarsha nasya, Ghrita Aschyotana and Saptamrita loha were advised to get supplementary effect in due to its Chakshushya and Rasayana action.

CONCLUSION

Even though Stargardt's macular degeneration is a chronic progressive disease; it can be managed by Principles of Ayurveda. By adopting the Ayurvedic treatment, the vision of the patient sustained and quality of the vision including acuity is improved. So to manage the diseases like macular degenerations, an Ayurvedic treatment protocol should be derived So that more data can be generated. The method adopted in this case can be taken as a guideline to manage the macular degenerative diseases which need extensive management to tackle the pathology.

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