Research Article

Effect Of Ayurvedic Therapeutic Intervention on Visual Function in Doshandhya (Retinitis Pigmentosa): A Case Report

Sarbeswar Kar[1*], Bharath R[2], Gavimath Shivanand[3], Greeshma Menon[4], Kushal A S[5], Ramyashree H S[6], Suma K Sangolli[7], Anil Kumar K M[8]

[1] Principal, Professor, Department of PG Studies in Shalakya Tantra, JSS Ayurveda Medical College, Mysuru.
[2,5,6,7] PG Scholar, Department of PG Studies in Shalakya Tantra, JSS Ayurveda Medical College, Mysuru.
[3] Professor & Head, Department of PG Studies in Shalakya Tantra, JSS Ayurveda Medical College, Mysuru.
[4] Assistant Professor & Head, Department of PG Studies in Shalakya Tantra, JSS Ayurveda Medical College, Mysuru.
[8] Department of Environmental Science, School of Life Sciences, JSS Academy of Higher Education and Research, Mysore-570015
[*] Corresponding Author: Bharath R, Email: bharath.ravi.798@gmail.com

ABSTRACT

Doshandya(Retinitis Pigmentosa) is one of the Drishtigata Netra Rogas, in which vision becomes impaired due to vitiated doshas and covers the drushti(Vision) during night causing obstruction of vision. But during daytime, due to heat rays the accumulated doshas liquifies in the drushti enabling the person to see clearly. Retinitis Pigmentosa (RP) is a hereditary disorder causing retinal pigment dystrophy, initially affecting the rod photo receptor cells of the retina with subsequent degeneration of the cones approximately 1 in 4,000–5,000 individuals suffer from RP. This article presents a case study of a 34 year old Male patient with the symptoms of Retinitis Pigmentosa treated with NetraSeka(Ocular irrigation), Netra Tarpana(Ocular pooling), Takradhara(Medicated buttermilk continuously pouring over forehead) , Chakshusya Basti(Medicated enema)and Abhyantara proyoga(internal medication). This case study showed significant improvement in his vision by Ayurvedic treatment modalities in management of Retinitis Pigmentosa.

Keywords: Chakshushya Basti, Doshandya, Nyctalopia, Retinitis Pigmentosa.

1. INTRODUCTION

Sarvendriyaanam Nayanam Pradhanam, Acharyas have mentioned prime importance of eyes among all the five sense organs. Netra (Eyes) are the seat of Darshana shakti(vision). Any impairment in the vision is a definite sign of ocular diseases. In Ayurveda the characteristic features of Retinitis Pigmentosa closely resemble Doshandya, one of the Drishtigata Rogas, in which vision becomes impaired, the doshas scatters and covers the drusti during night causing obstruction of vision. But during daytime, the rays of sunlight liquifies the accumulated doshas in the drushti, enabling the person to see clearly.

Retinitis Pigmentosa (RP) is a heterogeneous group of hereditary disorder causing primary pigmentary retinal dystrophy, It is a disorder predominantly affecting the rod photo receptor cells of the retina with subsequent degeneration of the cones, resulting in irreversible visual impairment and blindness. Retinitis Pigmentosa is the most common inherited retinal disease, with a global prevalence of approximately 1 in 4,000–5,000 individuals, affecting more than 1.5 million people worldwide[1,2] with the advances in molecular genetics, over 100 genes have been implicated in the pathogenesis of RP, making it one of the most genetically diverse ocular disorders.[3]

The disease typically manifests with night blindness (Nyctalopia) and impaired dark adaptation during the early stages, followed by progressive peripheral visual field constriction (tunnel vision) and eventual loss of central vision in advanced disease. The age of onset and rate of progression varies depending on the genetic mutation and mode of inheritance.

Despite significant advances in gene therapy, in the majority of patients current management is largely supportive, including low-vision rehabilitation and genetic counselling[4]. Therefore there is a need to explore alternative and complementary therapeutic approaches that may help preserve vision, delay disease progression, and improve quality of life.

Ayurveda advocates both Shodhana(elimination) and Samana(subsiding) therapies for the management of Netra Rogas. Panchakarma(5 modalities of procedure) such as Vamana(emesis), Virechana(purgation), Basti(medicated enema),Nasya(Medicated Nasal drops), and Raktamokshana(blood letting) are recommended for systemic elimination of vitiated Doshas, while Kriyakalpas (ocular pharmacology) including Seka(Ocular irrigation), Aschoytana(Topical ocular instillation), Anjana (collyrium), Tarapana (Ocular pooling), Putapaka(Ocular pooling), Pindi (Ocular poultice), Bidalaka(periocular medicated paste) as been advised for special eye care procedures. In the present case study the choice of treatment are Netra seka, Netra tarpana, ChaksushyaBasti with Abhyantara proyoga in management of Retinitis Pigmentosa (Doshandya).

2. MATERIALS AND METHODS

2.1 Case Report

A 34 years old Male patient came to Shalakya OPD, JSS Ayurveda Hospital, Mysuru with chief complaints of blurriness of vision in both eyes since 4 months which worsens on every alterative days. He also complaints of Night blindness since childhood.

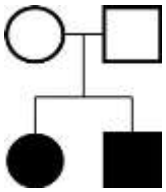
2.2 History of Present Illness

As per the statement of patient he was apparently normal, around 9 years of age, thenhe started facing difficulty in visionduring evening time. He was unable to identify person and objects in dim light. For these complaints he initially consulted Ophthalmologist and was prescribed with spectacles. However, despite regular use of spectacles, there was no improvement in his vision, then he was referred to higher centres for Retinal evaluation there he was diagnosed with Retinitis Pigmentosa. Following the diagnosis, he sought consultation at several hospitals in Mysuru and Bengaluru. However, he was informed that there was no definitive treatment available for his condition. During his routine checkup he was diagnosed with both eye Cataract and underwent Cataract surgery with IOL implantation in 2018. Over the past four months he started experiencing intermittent blurring of vision in both eyes, which worsens on every alternate days. Inspite of all treatment there was no significant improvement in his vision. As the symptoms worsened and began to interfere with his daily activitieshe approached Shalakya Tantra OPD of JSS Ayurveda Hospital, Mysuru for the better management.

History of past illness: K/C/O HTN on medication since 10 years
K/C/O Retinitis Pigmentosa since childhood

Surgical History: Phacoemulsification with foldable IOL implantation in 2018 for both eye

Family history: Parents consanguineous Marriage
Sister is also known case of Retinitis Pigmentosa



2.3 Personal History

Appetite – Normal
Bowel – Normal
Sleep – Disturbed
Diet – Vegetarian

2.4 Ashtavidha Pareeksha

Nadi – Kapha-Vata
Mala – Prakrutha
Mutra – 4-5 times/ day
Jihva – Alipta
Shabda – Prakrutha
Sparsha – Anushnasheetha
Drik – Vikrutha
Akruti – Madyama

2.5 General Examination

BP- 140/90 mmHg
PR – 82/min
R.R – 16/min
Temperature: 98.2^{O}F

2.6 Clinical Findings – Systemic Examination

Central Nervous System – Conscious, well orientedand HMF intact.
Respiratory system – B/L NVBS heard
Cardiovascular system – S1 S2 heard.
Per abdomen: Soft, Non Tender

2.7 Examination of Eye

Table 1: Visual Acuity before Treatment (11/12/2024)

V/A	Distant Vision (Unaided)	Distant Vision (Aided)	Near Vision (Unaided)	Near Vision (Aided)
OU	6/48p	6/30p	N36	N24p
OD	3/60	3/60	CF (+)	N36
OS	3/60	3/60	N36	N36p

Slit Lamp Examination

Table 2: Slit Lamp Examination

Ocular Examination	OD	OS
Eye Lashes	Normal	Normal
Eye Lids	Normal	Normal
Lacrimation Apparatus	Normal	Normal
Bulbar Conjunctiva	Mild Congestion +	Mild Congestion +
Palpebral Conjunctiva	Mild Congestion +	Mild Congestion +
Sclera	Normal	Normal
Cornea	Clear, Transparent	Clear, Transparent
Anterior Chamber	Normal Depth	Normal Depth
Iris	Normal	Normal
Pupil	3mm Round, regular, reactive	3mm Round, regular, reactive
Lens	Pseudophakia	Pseudophakia
Fundus	Peripheral Bony Spicules + Attenuated Blood vessels+ Pale fundus +	Peripheral Bony Spicules + Attenuated Blood vessels+ Pale fundus +
Confrontation Test	Mild Peripheral field constriction	Mild Peripheral field constriction

Fundus Examination



Figure 1: Fundoscopy image of right eye showing bony spicules, attenuated blood vessels, pale fundus.



Figure 2: Fundoscopy image of left eye showing bony spicules, attenuated blood vessels, pale fundus.

2.8 Nidana Panchaka

Table 3: Nidana Panchaka of Doshandhya

Nidana: Beejavayava dusti
Purvaroopa: Avila Darshana
Roopa: Ratrandyatva
Sampraptthi: Abnormalitiy in Beejaavayava ↓ Tridosha vaishamya ↓ Sanchaya of this doshavaishamya in Drishti ↓ Stanasamsraya of Prakupita doshas in the patalas of Netra ↓ Doshandya

Samprapti Ghatakas:

Table 4: Samprapti Ghatakas of Doshandhya

Dosha:Tridosha Dushya: Rasa and Rakta Agni: Mandagni Srotasa: Rasavaha and Raktavaha Sroto Dushti: Sanga Rogamarga: Madhyama Adhishtana: Trutiya Patala (Medoasritha Patala)

Diagnosis: Doshandya(Retinitis Pigmentosa)

2.9 Treatment.

Treatment Schedule in First Visit:

The patient first consultation to OPD of Shalakya Tatra, JSS Ayurveda Hospital, Mysore on 11th December 2024. He was admitted in IPD for further treatment.

The timeline of treatment is presented in table as follows

Table 5: Treatment Schedule in First Visit

Date	Therapy	Drug	Duration
11/12/24 – 17/12/24	Netra Seka	Triphala+ Yasti + Bala Kashaya	7days
11/12/24 – 17/12/24	Netra Tarpana	Jeevantyadi Ghruta	7days
11/12/24 – 17/12/24	Takradhara	Musta + Jatamansi + Amalaki + Guduchi+ Takra	7 days

Table 6: Oral Medication after First Visit Treatment

Date	Oral Medication	Dose	Anupana	Duration
18/12/24 – 18/01/25	Tab. Hriswa	1-0-1	A/F with warm water	1 month
18/12/24 – 18/01/25	Netraraksha Kashaya	15ml – 0 – 15ml	B/F with 45ml warm water	1 month

Treatment Schedule in Second Visit:
CHAKSHUSYABASTI (22/1/25)
Anuvasana Basti : Dhanwantara Taila – 120 ml
Niruha Basti :
Erandamoola kwatha - 350 ml
Madhu - 100 ml
Dhanwantara Taila - 100 ml
Shathapuspha + Yasti Kalka - 12g
Saindhava - 8 g
Total : 550 ml

Table 7: Timeline of Basti Treatment

Date	22/1	23/1	24/1	25/1	26/1	27/1	28/1	29/1
Basti	Anuvasana	Niruha	Anuvasana	Niruha	Anuvasana	Niruha	Anuvasana	Anuvasana

Table 8: Medication Advised in Second Follow-up

Date	Treatment	Dose	Route of Administration	Duration
30/1/25 – 28/02/25	Valiya Rasnadi Kashayam + Balaarista + Ashwagandha Choorna	15ml-0-15ml 15ml-0-15ml 1 tsp - 0 - 1 tsp	B/F with luke warm water	1 month
30/1/25 – 28/02/25	Anu Taila	2^{O}- 2^{O}	Nasal	1 month
30/1/25 – 28/02/25	Ashwagandha Bala lakshadi taila	Q.S	E/A head and foot massage	1 month
30/1/25 – 28/02/25	Vinayaka Anjanam	1^{O}- 1^{O}	Eye	1 month
30/1/25 – 28/02/25	Sunetra Eye Drops	1^{O}- 1^{O}	Eye	1 month

3. RESULTS

Table 9: Visual Acuity on 18/12/2024

V/A	Distant Vision (Unaided)	Distant Vision (Aided)	Near Vision (Unaided)	Near Vision (Aided)
OU	6/36p	6/36p	N24p	N24
OD	3/60	4/60	N36	N36
OS	6/36p	6/60	N24p	N24p

Table 10: Visual Acuity on 21/1/2025

V/A	Distant Vision (Unaided)	Distant Vision (Aided)	Near Vision (Unaided)	Near Vision (Aided)
OU	6/48p	6/36p	N24p	N24
OD	6/60p	4/60	N36	N36
OS	6/48p	6/48	N24p	N24p

Table 11: Visual Acuity on 30/1/2025

V/A	Distant Vision (Unaided)	Distant Vision (Aided)	Near Vision (Unaided)	Near Vision (Aided)
OU	6/36p	6/36p	N24	N24
OD	6/36p	6/60	N36	N36
OS	6/36p	6/36p	N24	N24

4. DISCUSSION

In Ayurveda, Doshandya falls under the category of Drishtigata Netra Roga predominantly caused by Kapha dosha covering the Drishti, resulting in impaired vision during the night. The disease is chronic and associated with Beejavaayava Dushti(hereditary disorder), which is yapya(difficult in treatment). Hence, treatment aims at Kapha Shamana, Drishti Prasadana, Vata Anulomana, and preservation of the remaining visual function.

In this case the first line of management included Netra Seka with Triphala[5,6] Yashtimadhu[7] and BalaKashaya. Triphala[8,9] contains Amalaki, Haritaki and Bibhitaki is described as Chakshushya, Lekhana, Kapha-Pittahara, and Rasayana. Its Kashaya Rasa and Laghu-Ruksha Guna help remove Kapha induced obstruction in the visual pathway while nourishing ocular tissues. Modern studies also demonstrate potent antioxidant activity, reducing oxidative stress[10,11], which is one of the major mechanisms involved in retinal degeneration. Yashtimadhu(Glycyrrhiza glabra)[12] possesses Madhura Rasa, Guru-Snigdha Guna, and is renowned for its Chakshushya, Rasayana, and Vata-Pittahara properties. It nourishes ocular tissues, protects retinal neurons through antioxidant activity[13] and promotes tissue regeneration. Bala(Sida cordifolia) [14] being Balya, Brimhana, and Vatahara, provides nourishment to deeper ocular tissues and helps improve neuronal strength.

Netra Tarpana with Jeevantyadi Ghrita[15] was choosen as treatment as it provide sustained nourishment to the ocular structures. Ghrita[16] is regarded as one of the best Drishti Prasadana drugs because of its Samskarasya Anuvartana, Yogavahi, and Sukshma properties, enabling deeper penetration of the active principles into ocular tissues. Jeevantyadi Ghrita[17] is indicated in various degenerative eye disorders and possesses Chakshushya, Rasayana, and Vata-Pittahara actions. It nourishes the retinal tissues, lubricates the ocular structures, and supports the function of the photoreceptors for vision.

The administration of Takradhara[18] helped alleviate psychological stress, improve sleep quality, and reduce mental fatigue, thereby contributing to overall neurological well-being. Since chronic retinal degeneration often affects quality of life, Satvavajaya Chikitsa through relaxation therapies and counselling complements ocular management.

The chronic degeneration in Retinitis Pigmentosa is predominantly due to Vata Prakopa. Basti is considered Ardh Chikitsa(half line of treatment) by Acharya Charak[19] and it is also helpful in Shakhagata, Koshthagata and Marmagat Rogas as well as Urdwajatrugata(above clavicle) Roga.[20] Acharya Susrutha states Basti also acts as Prinan to Netra (Eyes)[21] Netra Vikara are relatively associated with the Majjavaha Srotas vikara[22] & in Majjakshaya Timira Darsh-anam[23] these symptoms are relative with Netra roga.In Ashtang Hridaya, Madhutailika Basti when added with Yastimadhu as Kalka in it, acts as Chakshushya So in this case Chakshushya Basti[24] was administered, in the management of Retinitis pigmentosa. The Basti formulation containing Dhanwantara taila in Anuvasana Basti. Erandamoola kwatha, Yashtimadhu and Shatapushpa kalka, Dhanwantaram Taila, Sindhava lavanaand Madhu in Niruha Basti helping in normalizing vitiated Vata, improve tissue nourishment, and facilitate drug delivery to deeper tissues. Through correction of vitiatied Dosha in the body. Chakshushya Basti thus supports and nourish the ocular tissues and may help to preserve residual retinal function of vision in Retinitis pigmentosa.

Among the oral medications, Netraraksha Kashaya is indicated for various chronic eye diseases to its Kapha-Pittahara, Rasayana, and Chakshushya properties. It helps reduce excessivekapha accumulation thereby maintaining ocular nutrition. Valiya Rasnadi Kashayamacts as Balya, Rasayana, and Vatahara, promoting neuronal nourishment and improving tissue metabolism. Balarishta and Ashwagandha Choorna strengthen the nervous system through their Brimhana, Balya, and Rasayana actions, which may prevents further damage of retinal neurons. Anu Taila Pratimarsha Nasya enhances the function of Urdhwajatru (organs above the clavicle) and is classically indicated by our acharyas in diseases of the head and eyes as a part of Shiroshodhana and nourishment. External application of Ashwagandha Bala Lakshadi Taila further pacifies Vata and nourishes neuromuscular tissues.

The use of Vinayaka Anjanamas an eye drops on the ocular surface acts directly by removing Kapha Avarana in netra, promoting Drishti Prasadana, and stimulating normal ocular physiology. Sunetra Eye Drops provided additional ocular lubrication and maintained tear film stability, thereby improving ocular structures.

The combined effect of these therapies aimed at predominantly Kapha Shamana, Drishti Prasadana, Rasayana, Balya, and Vatahara properties. By reducing Kapha obstruction, nourishing the ocular tissues, improving microcirculation, and

reducing the oxidative stress, preserving the functional integrity of the remaining retinal cells. These case represented the improvement in the visual acuity of the patient in the first visit the distant unaided vision in right eye from 3/60 to 6/36p and in left eye 3/60 to 6/36p which indicated improvement in vision and near vision unaided from counting of finger (CF) to N36 and in left eye N36p to N24 indicating improvement with no further deterioration of vision after two course of treatment. The changes in fundus of bony spicules, attenuated blood vessels, Pale fundus remained unchanged with no further deterioration. The person blurriness in vision during day time has been improved, after the treatment he is able to carryout his day to day activity better and improved quality of life. Although Retinitis pigmentosa is hereditary retinal degeneration cannot be reversed, Ayurvedic treatment provided the function of surviving retinal tissue from further damage, resulting in improvement in visual acuity and overall visual performance without further deterioration in the vision as observed in this case.

5. CONCLUSION

The present case demonstrated that Ayurvedic management planned on the principles of Kapha Shamana, Drishti Prasadana, Rasayana, and Vatahara Chikitsa provided functional improvement in a patient with Retinitis Pigmentosa (Doshandha) by improvement in visual acuity preventing the further deterioration of vision till date. By nourishing ocular tissue, preserving the residual retinal function, and enhancing the quality of life. This case highlights the potential role of Ayurveda as a supportive and alternative approach in the long-term management of Retinitis Pigmentosa.

ACKNOWLEDGEMENTS

The author sincerely acknowledge everyone who contribute to successful completion of this work

INFORMED CONSENT

Informed consent was obtained from the participant for the study.

CONFLICTS OF INTEREST

None

FUNDING

The authors received no financial support for the study.

DATA AVAILABILITY

The datasets and information used in this manuscript may be accessed by contacting the corresponding author.

REFERENCES

1. Verbakel SK, van Huet RAC, Boon CJF, den Hollander AI, Collin RWJ, Klaver CCW, et al. Non-syndromic retinitis pigmentosa. Prog Retin Eye Res. 2018;66:157–186.
2. Hamel C. Retinitis pigmentosa. Orphanet J Rare Dis. 2006;1:40.
3. GeneReviews®. Nonsyndromic Retinitis Pigmentosa Overview. University of Washington, Seattle; updated 2023. Available from: National Center for Biotechnology Information (NCBI).
4. Al-Nawaiseh S, et al. Current understanding on Retinitis Pigmentosa: a literature review. Front Ophthalmol. 2025;5:1600283.
5. Dr. Nirmal Saxena, Vangasena Samhita, chaukhamba Sanskrit Series Office, First edition, 2004.
6. Laxmipati shashtri, Vidyotini tika Sanhita Yogratnakarah, chsikhamba prakashan.
7. Ghunekar Krishnashastri, Pandey S Bhavprakasha Nighantu, Chaukhamba Bharati academy, 2010.
8. Ramteke R Chakshushya Dravya Guidelines For Health Promotion Of Eye International Journal Of Ayurveda And Pharmaceutical Chemistry, 2017.
9. G. H. Singhal, Sushruta Samhita of Sushruta Part 1 (Sutra & Nidana Sthana), 2nd edition. Varanasi Chaukhambha Sanskrit Pratishthan, Ch 38, shloka 56, 2007; 316.
10. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC429 3677.
11. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC429 3677.
12. PathyaPathya Vibhodhakan - Kaiyadevanigantu: Edited and translated by pressure Priyavat Sharma. Chaukhambha Orientelia Varanasi 2009 verse 101-102 P.no 22
13. (PDF) A Critical Appraisal on Phytochemical Constituents and Therapeutic Effect of Yashtimadhu (Glycyrrhiza glabra) (researchgate.net)
14. Acharya Charaka, Charaka Samhita by Agnivesha revised by Charaka and Dridhabala of Chakrapanidatta, Sutrastana 25/40 chapter, first edition, edited by Acharya Yadavaji and Trikamji, Varanasi, Chaukhamba Sanskrit Samsthana, 2001, Page no-132.
15. Patil, Santosh & Shetty, Suhaskumar & Tejaswi, Poornachandra. (2023). Pharmaceutico-Analytical Assessment of Jeevanthyadi ghrita-A Polyherbal Ayurveda Formulation and its Potential Benefits. Pharmacognosy Research. 15. 591-600. 10.5530/pres.15.3.062.

16. G. H. Singhal, Sushruta Samhita of Sushruta Part 1 (Sutra & Nidana Sthana), 2nd edition, Chaukhambha Sanskrit Pratishthan, Ch 45, shloka 96, 2007; 385.
17. Patil, Santosh & Shetty, Suhaskumar & Tejaswi, Poornachandra. (2023). Pharmaceutico-Analytical Assessment of Jeevanthyadi ghrita-A Polyherbal Ayurveda Formulation and its Potential Benefits. Pharmacognosy Research. 15. 591-600. 10.5530/pres.15.3.062
18. Dr. Anju K V, Dr. Kavitha C K, "A Review on Different Mode of Action of Takradhara - As a Novel Panchakarma Therapy", Volume 11 Issue 8, August 2022, International Journal of Science and Research (IJSR), Pages: 821-824,
19. Kunte AM, Navare KRS. Ashtanghrdaya. Paradkar PHS, editor. Varanasi: Chaukhambha Sanskrit Sansthan; 2010. Sutrasthana 1/25. p. 16 [Crossref][PubMed][Google Scholar]
20. Tripathi B. Charak Samhita. Varanasi: Chaukhambha Surbharati Prakashan; 2007. Siddhisthana 1/38–40. p. 1169 [Crossref][PubMed][Google Scholar]
21. Sharma AP. Sushrut Samhita. Sharma AR, editor. Varanasi: Chaukhambha Vishwabharati; 2018. [Crossref][PubMed][Google Scholar]
22. Kunte AM, Navare KRS. Ashtanghrdaya. Paradkar PHS, editor. Varanasi: Chaukhambha Sanskrit Sansthan; 2010. Sutrasthana 11/11. p. 184 [Crossref][PubMed][Google Scholar]
23. Kunte AM, Navare KRS. Ashtanghrdaya. Paradkar PHS, editor. Varanasi: Chaukhambha Sanskrit Sansthan; 2010. Sutrasthana 11/19. p. 185 [Crossref][PubMed][Google Scholar]
24. Kondekar A, Kulkarni A, The Role of Chakshushya Basti in the management of Timira with special reference to Myopia. J Ayu Int Med Sci. 2025;10(S1):3-7.