

ISSN 2456-3110 Vol 2 · Issue 5 Sep-Oct 2017

# Journal of Ayurveda and Integrated Medical Sciences

www.jaims.in

Indexed





# Ayurvedic management of Retinitis Pigmentosa (*Doshandha*) - A Case Study

# Anju D,<sup>1</sup> Pushpa Raj Poudel,<sup>2</sup> Ajoy Viswam,<sup>3</sup> Ashwini MJ.<sup>4</sup>

<sup>1,2,3</sup>Post Graduate Scholar, <sup>4</sup>Professor and H O D, Department of Shalakya Tantra, Sree Dharmasthala Manjunatheshwara College of Ayurveda, Hassan, Karnataka, India.

# ABSTRACT

Retinitis pigmentosa (RP) is an inherited, degenerative eve disease that causes severe vision impairment due to the progressive degeneration of rod photoreceptor cells in retina. This form of retinal dystrophy manifests initial symptoms independentof age; thus, RP diagnosis occurs anywhere from early infancy to late adulthood. This primary pigmentary retinal dystrophy is a hereditary disorder predominantly affecting the rods more than the cones. The main classical triads of retinitis pigmentosa are arteriolar attenuation, Retinal bone spicule pigmentation and Waxy disc pallor. The main treatment of retinitis pigmentosa is by using Low vision aids (LVA) and Genetic counseling. As such a complete cure for retinitis pigmentosa is not present. So a treatment protocol has to be adopted that helps in at least the symptomatic relief. In Ayurveda, the signs and symptoms of this can be compared with the Lakshanas of Doshandha which is one among the Dristigata Roga. It is considered as a diseased condition in which sunset will obliterate the Dristi Mandala and makes the person blind at night time. During morning hours the rising sunrays will disperse the accumulated Dosas from Dristi to clear vision. This disease resembles Kaphaiatimira in its pathogenesis, but the night blindness is the special feature. Since the disease is purely Kaphaja, a treatment attempt is planned in Kaphara and Brimhana line. The present paper discusses a case of retinitis pigmentosa and it's Ayurvedic Treatment.

Key words: Retinitis Pigmentosa, Doshandha, Dristigataroga, Kaphahara, Brimhana.

# INTRODUCTION

Retinitis pigmentosa (RP) is inherited, degenerative eye diseases that cause severe vision impairment due to the progressive degeneration of rod photoreceptor cells in retina.<sup>[1]</sup> This form of retinal dystrophy manifests initial symptoms independent of age; thus, RP diagnosis occurs anywhere from early infancy to

#### Address for correspondence:

Dr. Anju D

Post Graduate Scholar, Department of Shalakya Tantra, Sree Dharmasthala Manjunatheshwara College of Ayurveda, Hassan, Karnataka, India.

E-mail: anjudamodaran91@gmail.com

Submission Date : 30/08/2017 Accepted Date: 28/09/2017

 Quick Response Code

 Website: www.jaims.in

DOI: 10.21760/jaims.v2i05.10275

late adulthood.<sup>[2,3]</sup> This primary pigmentary retinal dystrophy is a hereditary disorder predominantly affecting the rods more than the cones.<sup>[4]</sup> The most common mode is autosomal recessive, followed by autosomal dominant. It appears in the childhood and progresses slowly, often resulting in blindness in advanced middle age. Males are more commonly affected than females in a ratio of 3:2. Disease is almost invariably bilateral and both the eyes are equally affected. The main clinical features of retinitis pigmentosa are Night blindness, difficulty in dark adaptation, tubular vision.<sup>[5]</sup> The main treatment of retinitis pigmentosa is by using Low vision aids (LVA) and Genetic counseling.<sup>[6]</sup>

In Ayurveda the signs and symptoms of ptosis can be compared with *Doshandha* which is one among the *Dristigata Rogas*. It is considered as a diseased condition in which sunset will obliterate the *Dristi Mandala* and make the person blind at night time.<sup>[7]</sup> During morning hours the rising sunrays will disperse

# ISSN: 2456-3110

# CASE REPORT Sep-Oct 2017

the accumulated *Dosas* from *Dristi* to clear vision.<sup>[8]</sup> This disease ressembles *Kaphajatimira* in its pathogenesis, but the night blindness is the special feature.<sup>[9]</sup>

Ayurveda gives the physician's opportunity to incorporate new medication in the explained conditions and name the newly diagnosed condition based on *Nidana, Dosha, Dhatu* and *Dushya*. Keeping this point in mind a case study was done on Retinitis Pigmentosa (*Doshandha*).

# **CASE REPORT**

A male patient aged 26 years was apparently normal 20 years ago. Gradually he developed difficulty in distant vision. His parents observed that he had difficulty in viewing the wall clock and his teacher reported that he has difficulty in visualizing the black board. So his parents took him to an Ophthalmologist and he was provided with spectacles. He used the spectacles for 3 years and he noticed that even though using spectacles, his vision is getting blurred. At the same time he also observed that he has got difficulty in night vision. It was very difficult for him to find objects after sunset.

For these complaints he went to an Eye hospital and from there it was told that he has some hereditary visual problem and there he got his spectacles changed. Further on as he grew up he continued to have more difficulty in night vision. On further interrogation patient revealed the history of consanguineous marriage in family and his father have the same complaints.

In his 10<sup>th</sup> Std. he again went to another Eye Hospital. There also he was told that he has got a hereditary disorder. The same was repeated in 2008 in another Eye Hospital, Bangalore.

In 2008 he went to Sreedhareeyam Eye Hospital. From there he was told that he has got a hereditary disorder and by the help of Ayurveda, he can prevent the further vision loss. He took a course of treatment from there and then he came to our hospital in 2010.

From 2010, he is regularly taking treatment in our hospital and this is his  $6^{th}$  course.

# **General Examination**

- Pallor Absent
- Icterus Absent
- Cyanosis Absent
- Clubbing Absent
- Lymphadenopathy Non palpable
- Edema Absent
- BP 120/80 mmhg.
- Pulse 74 bpm

#### **Systemic Examination**

CVS, CNS, RS, GIT - No abnormality.

#### **Local Examination**

- Head posture: head is kept in straight and erect posture without any tilt of head.
- Facial Symmetry: both eyebrows and eyelids are at the same level
  - o Symmetrical nasolabial folds
  - o Symmetrical angle of mouth on both sides
- Occular posture: Visual axes of two eyes are parallel to each other in primary position and is maintained in all position of gaze.
- Visual Acuity

Visual Acuity	Both Eye	Right Eye	Left Eye
Without glass	6/36(p)	6/36(p)	6/36(p)
With glass	6/9(p)	6/12(p)	6/9(p)

Near Vision

Near Vision		
Without Glass	N9(p)	
With Glass	N6	

# Anju D. et.al. Ayurvedic management of Retinitis Pigmentosa (Doshandha) - A Case Study

# ISSN: 2456-3110

- Eyebrows : Symmetrically placed on each side of face above eyelids
  - Curved with convexity upwards
- Eyelids: Upper eyelid covers 1/6<sup>th</sup> of cornea
  - o Lower eyelid touches the limbus
- Eye lashes: Upper eye lid directed forwards, upwards and backwards
  - Lower eye lids directed forwards downwards and backwards
  - No trichiasis, poliosis.
- Lacrimal apparatus: skin over lacrimal sac redness, swelling absent
- Eye ball : proptosis, enopthalmos absent
  - Movements unioccular and binocular movementspossiable
- Conjunctiva: Congestion ; absent
  - o Chemosis absent
  - o Discolouration absent
  - Follicles absent
  - o Papillaes absent
  - Pterygium and Pingecula absent
- Sclera: white in colour
  - Covered by bulbar conjunctiva
- Cornea: Size; microcornea, macrocornea absent
  - Shape concavo convex shaped
  - o keratoconus, keratoglobus absent
  - Surface smooth
  - o Transparency no opacities found
- Antreior chamber : Shallow -torch light method
- Iris : pattern presence of crypts, ridges and collaretes
- Pupil : number one in number
  - $\circ \quad \text{Site-centrally placed} \\$
  - $\circ$  Shape- round

- Color black
- Reflexes good
- o mydriasis, miosis absent

**CASE REPORT** 

Sep-Oct 2017

- Fundus examination
  - o Media : hazy
  - o Vessels : thin
  - Foveal reflex : dull
  - Bony spicule appearance ++

#### Treatment

- Seka with Triphala Kashaya , Yatimadhu Kashaya, Lodhra Kashaya.
- Aschotana with Jeevantyadi Ghritha<sup>[10]</sup>
- Bandana
- Seka
- Tarpana with Jeevantyadi Ghritha
- Bandana
- Oral medications :
  - 1) Tab Sapthamruthaloha 1 0 1 A/F
  - 2) Triphala Ghritha<sup>[11]</sup> 1tsp 0 1tsp with milk A/F

# Improvement

Significant changes were noted in the signs and symptoms.

- a) On 3<sup>rd</sup> day of treatment patient had mild relief from burning sensation of both eyes
- b) On 5<sup>th</sup> day of the treatment patient had relief from blurriness of vision
- c) Changes noted in visual acuity is noted below
- Visual Acuity on 24/09/2011

Visual Acuity	Both Eye	Right Eye	Left Eye
Without glass	4/60	3/60	6/60
With glass	6/9(p)	6/12(p)	6/9(p)

# ISSN: 2456-3110

# Visual Acuity on 14/07/2012

Visual Acuity	Both Eye	Right Eye	Left Eye
Without glass	6/60	6/60	6/60
With glass	6/9(p)	6/12(p)	6/9(p)

#### Visual Acuity on 06/12/2015

Visual Acuity	Both Eye	Right Eye	Left Eye
Without glass	6/60	6/60	6/60
With glass	6/9(p)	6/12(p)	6/9(p)

# Visual Acuity on 22/02/2016

Visual Acuity	Both Eye	Right Eye	Left Eye
Without glass	6/36(p)	6/36(p)	6/36(p)
With glass	6/9(p)	6/12(p)	6/9(p)

# Visual Acuity on 2/02/2017

Visual Acuity	Both Eye	Right Eye	Left Eye
Without glass	6/36(p)	6/36(p)	6/36(p)
With glass	6/9(p)	6/12(p)	6/9(p)

# DISCUSSION

Retinitis pigmentosa (RP) is inherited, degenerative eye diseases that cause severe vision impairment due to the progressive degeneration of rod photoreceptor cells in retina. This form of retinal dystrophy manifests initial symptoms independentof age; thus,RP diagnosis occurs anywhere from early infancy to late adulthood. This primary pigmentary retinal dystrophy CASE REPORT Sep-Oct 2017

is a hereditary disorder predominantly affecting the rods more than the cones. The most common mode is recessive, followed autosomal by autosomal dominant. It appears in the childhood and progresses slowly, often resulting in blindness in advanced middle age. Males are more commonly affected than females in a ratio of 3:2.<sup>[12]</sup> Disease is almost invariably bilateral and both the eyes are equally affected. The main clinical features of retinitis pigmentosa are Night blindness, difficulty in dark adaptation, tubular vision. The main treatment of retinitis pigmentosa is by using Low vision aids (LVA) and Genetic counseling.

In Ayurveda the signs and symptoms of retinitis pigmentosa can be compared with Doshandha which is one among the Dristigata Rogas. It is considered as a diseased condition in which sunset will obliterate the Dristi Mandala and makes the person blind at night time. During morning hours the rising sunrays will disperse the accumulated Dosas from Dristi to clear vision.<sup>[13]</sup> This disease resembles Kaphajatimira in its pathogenesis, but the night blindness is the special feature. The treatment protocol adopted here is Kaphahara. Here mainly the drug passes through the blood-aqueous, blood-vitreous and blood retinal barriers to reach the target tissues of eye. Intra ocular penetration of topically instilled drugs is determined by the corneal epithelium. Stroma allows rapid passage of the drug through endothelium into the anterior chamber. The medicines are absorbed Sandhi, through the Akshikosa, Sira, Sringatakamarma, Ghrana, Asya and Srotas. After absorption, the medicine expels out the vitiated Doshas.

# CONCLUSION

Retinitis pigmentosa (RP) is inherited, degenerative eye diseases that cause severe vision impairment due to the progressive degeneration of rod photoreceptor cells in retina. In Ayurveda the signs and symptoms of retinitis pigmentosa can be compared with *Doshandha* which is one among the *Dristigata Roga*. Since the pathogenesis of RP and *Kaphajatimira* are similar, the treatment protocol adopted here was

# ISSN: 2456-3110

CASE REPORT Sep-Oct 2017

Kaphahara. Here Triphala, Yastimadhu and Lodhra were selected for Seka as these three drugs are Chakshushya and Tridoshahara. Aschotana and Tarpana was done with Jeevantyadi Ghrita as all the ingredients are Chakshushya and Tridoshahara, Sheetaveerva and Madhuravipaka. Similarly Sapthamrutha Loha and *Triphala Ghrita* are Tridoshahara and Chakshushya. Here the line of treatment is Kaphahara, Chakshushya and Brihmana. Oral drugs find difficulty to cross blood-aqueous, blood-vitreous and blood-retinal barriers to reach the target tissues of eye. The topical drugs can reach there and achieve higher bio-availability. Even though Doshandha is explained as an Asadhyavyadhi by Acharyas, here an attempt is made such that there is an improvement in the living condition of the patient, since the pathogenesis and some symptoms of RP are similar to that of Kaphaja Timira and it has showed that the Visual acuity is stabilized by this.

#### REFERENCES

- Parsons, Diseases of Eye, Elsevier Publication; 22<sup>nd</sup> edition, 2006,p.460
- Parsons, Diseases of Eye, Elsevier Publication; 22<sup>nd</sup> edition, 2006,p.460
- Kanski JJ, Clinical Ophthalmology, Elsevier publication; 5<sup>th</sup> edition, 2006;p.491
- 4. Khurana A.K. Comprehensive Ophthalmology. 4<sup>th</sup> edition. New delhi: New Age International, 2007;p.27
- Kanski JJ, Clinical Ophthalmology, Elsevier Publication; 5<sup>th</sup> edition, 2006;p.491

- Khurana A.K. Comprehensive Ophthalmology. 4<sup>th</sup> edition. New delhi: New Age International, 2007;p.268
- Shankar Uday, Textbook of Shalakya Tantra, Chowkhamba Vishwabharathi Series, Varanasi, Vol-1, Netra Roga, p.640
- Shankar Uday, Textbook of Shalakya Tantra, Chowkhamba Vishwabharathi Series, Varanasi, Vol-1, Netra Roga,p.640
- Shankar Uday, Textbook of Shalakya Tantra, Chowkhamba Vishwabharathi Series, Varanasi, Vol-1, Netra Roga, p.595
- Vruddha Vagbhata. Ashtanga Samgraha with Sasilekha commentary of Indu, Editor Shivprasad Sharma. 2nd edition. Varanasi :Chaukhambha Sanskrit Series; 2008;p.706
- 11. Prof Srikantha Murthy, Sharangadhara Samhitha: Varanasi: Chowkhamba Orientalia 2012;p.85
- Kanski JJ, Clinical Ophthalmology, Elsevier publication; 5<sup>th</sup> edition, 2006;p.491
- Shankar Uday, Textbook of Shalakya Tantra, Chowkhamba Vishwabharathi Series, Varanasi, Vol-1, Netra Roga, p.595

**How to cite this article:** Anju D, Pushpa Raj Poudel, Ajoy Viswam, Ashwini MJ. Ayurvedic management of Retinitis Pigmentosa (Doshandha) - A Case Study. J Ayurveda Integr Med Sci 2017;5:183-187. http://dx.doi.org/10.21760/jaims.v2i05.10275

Source of Support: Nil, Conflict of Interest: None declared.

\*\*\*\*\*