#### Case study

# World Journal of Pharmaceutical and Life Sciences WJPLS

www.wjpls.org

SJIF Impact Factor: 6.129

## AYURVEDIC MANAGEMENT OF RETINITIS PIGMENTOSA (DOSHANDHA)-A CASE STUDY

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Article Received on 31/01/2020

Article Revised on 22/02/2020

Article Accepted on 12/03/2020

### ABSTRACT

Retinitis Pigmentosa is (RP) an inherited, degenerative eye 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 independent of age; thus, RP diagnosis occurs anywhere from early infancy to the 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 using Low vision aids and Genetic counselling. 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 *Drishtigata Roga*. It is considered as a diseased condition in which sunset will obliterate the *Drishti Mandala* and makes the person blind at night time. During morning hours the rising sunrays will disperse the accumulated *Doshas* from *Drishti* to clear vision. This disease resembles *Kaphajatimira* in its pathogenesis, but the night blindness is the special feature. Since the disease is purely *Kaphaja*, a treatment attempt is planned in *Kaphahara* and *Bruhana* line. The present paper discusses a case of Retinitis Pigmentosa and its Ayurvedic Treatment.

KEYWORDS: Retinitis Pigmentosa, Doshandha, Drishtigata roga, Kaphahara, Brimhana.

## INTRODUCTION

Retinitis Pigmentosa 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 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 RP is by using Low vision aids and Genetic counselling.<sup>[6]</sup> In Ayurveda, the signs and symptoms of this can be compared with the Lakshanas of Doshandha which is one among the Drishtigata Roga. It is considered as a diseased condition in which sunset will

obliterate the *Drishti Mandala* and makes the person blind at night time.<sup>[7]</sup> During morning hours the rising sunrays will disperse the accumulated *Doshas* from *Drishti* to clear vision.<sup>[8]</sup> This disease resembles *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 38 years, having complaints of difficulty in distant vision, burning sensation bilateral eye, diminished night vision during auto driving.

- General Examination: BP- 120/80 Pulse- 78min
- Systemic Examination: CVS, CNS,RS,GIT- No Abnormality
- Local Examination:

Head Posture- Head is kept in straight & erect posture without any tilt of head.

Facial Symmetry-both eyebrows & eyelids are at the same level.

Ocular Posture- Visual axes of two eyes are parallel to each other in primary position and is maintained in all position of gaze.

#### On Examination

Eyebrows- Symmetrically placed on each side of face above eyelids. Curved with convexity upwards. Eyelashes- NAD Eyelashes- NAD Conjunctiva- minimal bulbar congestion Cornea- clear AC- Normal Pupil- R-Sluggish Reactive, L-NSRL Lens- WNL

#### • Fundus Examination

Bilateral pupil fully dilated under Mydriasis Media- Bilateral Hazy Vessels-Bil. attenuation of vessel(thin vessels) Optic Disc- Bilateral Waxy disc Foveal reflex- Bilateral dull Peripheral Retina- Bony Spicules++ Unaided PH Vision Acuity= R-6/9(p) 6/9 L-6/12(p) 6/12 Tono= RE- 17.3mmhg, LE- 14.6mmhg.

#### Treatment

1) *Snehan*-By *Triphala Grita* for 3days. *Triphala Gritpana* before meal. Day 1- 10ml

Day2- 20ml

Day 3- 30ml.

2)Mridu Virechan-By Triphala Churna

*Matra*-3-5gm with lukewarm water at bedtime for 3 days.

3) Followed by *Snehan* And *Mridu Virechan- Triphala Grita Ubhay Netra Tarpan* done for 7 days at Morning 9.30-10.00AM.

4) Oral Medication- Saptamrut Loha 1BD

5) Ahar- fried Yakrut Mansa along with pinch of pippali churna.

#### **Progressive Report**

1) On 3<sup>rd</sup> day of treatment patient had mild relief from burning sensation of both eyes and Redness of bilateral eye.

2) On 7<sup>th</sup> day of treatment patient totally relief from burning sensation of both eyes.

3) On 20<sup>th</sup> day of treatment patient's Vision Acuity is noted below-

VA unaided PH RE-6/9(p) 6/9 LE-6/12(p) 6/12 4) On 35<sup>th</sup> day of treatment -VA unaided PH
RE-6/9 6/9
LE-6/12 6/12
5) On 50<sup>th</sup> day- vision with spect- RE-6/9
LE-6/9

	SPH	CYL.	AXIS	SPH	CYL.	AXIS
Dist.	+0.50			+0.50		
Near	+1.25			+1.25		

#### DISCUSSION

Retinitis Pigmentosa is inherited, degenerative eye disease that cause severe vision impairment due to the progressive degeneration of rod photoreceptor cell in retina. This form of retinal dystrophy manifests initial symptoms independent of age, thus retinitis pigmentosa diagnosis occurs anywhere from early infancy to adulthood.

The main clinical features of Retinitis Pigmentosa are night blindness, difficulty in dark adaptation, tubular vision. The main treatment of Retinitis Pigmentosa is by genetic counselling.

In Ayurveda, the sign and symptoms of retinitis pigmentosa can be compared with *Doshandha* which is one among the *drishtimandala* and makes the person blind at night time. During morning hours the rising sunrays will disperse the accumulated *Dosha* from *drishti* to clear vision.

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 tissue 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 through the *akshikosha*, *Sandhi*, *sira*, *shringatakamarma*, *Ghrana*, *Asya* and *strotas*. After absorption, the medicine expel out the vitiated *Doshas*.

#### CONCLUSION

Retinitis Pigmentosa is inherited, degenerative eye diseases that cause severe vision impairment due to the progressive degeneration of rod photoreceptor cell in Retina.

In Ayurveda the sign and symptom of retinitis pigmentosa can be compared with *Doshandha* which is one among the *Drishtigata roga*. Since the pathogenesis of Retinitis Pigmentosa and *Kaphajatimira* are similar, the treatment protocol adopted here was *Kaphahara*.

Here, *Triphala* is selected for *Snehana*, *Virechana*, *Tarpana* as this drug is *Chakshushya*, *Virechak* and *tridoshaghna*.

Saptamrutaloha and triphalagrita are chakshushya and tridoshghna. Here the line of treatment is Kaphahara, Chakshushya and Brimhana.

Oral drugs find difficulty to cross blood-aqueous, bloodvitreous and blood-retinal barrier to reach the target tissue of eye. The topical drugs can reach there and achieve higher bio-availability. Even through *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 Retinitis Pigmentosa are similar to that of *Kaphaja Timira* and it was showed that the visual acuity is stabilized by this.

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