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Case Study

UTILITY OF ANJANA IN RETINITIS PIGMENTOSA: A CASE REPORT

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Abstract

Retinitis pigmentosa (RP) is a generic disorder characterized by bilateral symmetrical progressive dysfunction, cell loss and eventual atrophy of retina. Initially photoreceptors are involved (rods is predominant than cones). In classics of Ayurveda, this ailment some extent we can correlate with Animitha linganasa (Vision loss with unknown cause). In acute condition this may correlate with Nakulandya (Night blindness) or Dumradarshi (Smoky vision). There is no satisfactory treatment for this disease in all present medical systems. Many texts like Susrutha samhita, Astangahrudaya, Yogaratnakara, Bhava prakasa, Rasa Ratna Samucchaya etc. have advised a number of compound preparations for eye disease for both topical and internal routes. No specific treatment mentioned for Animitha linganasa in Ayurveda because of bad prognosis but we can observe some results with conservative treatments like Tarpana, Anjana, Nasya etc. With these measures disease is not cured totally but patient may get some relief from symptoms and also we can prevent the further progression of the disease. For the present study Anjana with Useradhi rasakriya was selected as a treatment module.

Key words: Retinitis pigmentosa; Animitha linganasa; Conservative treatment; Anjana; Useeradhi rasakriya.

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INTRODUCTION

A 28 year-old male patient came with diminished vision in both eyes, history for 20 years. Nyctalopia was first noticed, he had paid no attention to this. It became gradual onset of blurred vision in day time also and doctors diagnosed as typical RP at the age 16 years. He also complained of eye strain, headache and body weight loss. There is no history of DM/HTN; the family history was not suggestive of same complaint to other member. Auto-refractometry and mirror retinoscopy were done for confirming diagnosis of refractive error. His uncorrected visual acuity was hand movement (HM) 3 m for (OD/ R) and (OS/L). Colour vision – unable to identify colours. Slit lamp examinations of external eye were normal. Intraocular pressures were normal in both eyes. The fundic lesions were pigmentary deposits presents in eyes, no disc oedema, no intraretinal hemorrhage, no cotton wool spots, no cupping of the disc. Routine hematology investigations (TC, DC, Hb%, ESR, RBS) and urine investigations were within normal limits. He has been regularly followed-up in the hospital. Observations & results were recorded as per standard parameters.

MATERIALS AND METHODS

The patient of case study was from OPD with OPD No. 0813215. For the present study Anjana with Useradhi rasakriya was selected as a treatment module. Anjana is comes under one of the kriyakalpa, in which application of medicaments in the eye lids with a salaka or tip of the finger from medial canthus to outer canthus and it spreads all over the eye. It can be used not only in diseased condition but also in healthy eyes to maintain the visual power. Susruta described 3 types of Anjanas based on their therapeutic effect i.e. Lekhananjana, Ropananjana, Drishti prasadana.[1] Besides, 1/4th spoon of Saptamrutha loha along with Madhu and Ghrita was given twice a day as internal medication. Patients were advised dietary restrictions during the treatment period.

Useradi rasakriya was prepared at treatment centre and it contains Useera mula (*Vetiveria zizaniodes*) 1part, Pippali Kana (*Piper longum* Linn.) 16 parts, Saindhava (Rock salt) 16 parts, Madhu and Grutha. Prepared useera kasaya with 1:4 ratio of useera and water, it reduced to1/8th. Fine powder of Pippali kana and saindhava added to this. After when it became thick, ghrutha and madhu added finally and boiled with low flame. Then prepared anjana preserved in sterile bottle and used.

Anjana Procedure

While doing the anjana, the patient is advised to lie in supine position on a comfortable bed. The procedure was explained to the patient. After taking consent from patient, eye lids are opened by using the thumb and index fingers of the left hand, to expose the posterior margin of eye lid. Useradhi anjana is taken with tip of the right index finger and it is applied over the lid margin and posterior lid starting from the inner canthus to outer canthus, and it is repeated 3 times for spreading the medicine. After the application of Anjana, patient was advised to close his eyes and roll the eye ball in clockwise for proper spread of Anjana in eyes. Eyes are washed with pure water, when the patient is feeling comfortable in eyes. The lids are opened and inspected for drug precipitants and impurities and removed gently with dry cotton wool. Slight fomentation was done. After wards asked the patient to close eyes for some time. The patient was administered Anjana once daily for 7 consecutive days with 7days gap. This was continued for 3 months. Patient is advised to take light and hot diet, and advised not to take head bath, cold water, curd etc during treatment time.

Saptamrutha loha is prepared with Amalaki (*Emblica officinalis* Gaertn.) 1/3rd part,

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Hareetaki (*Terminalia chebula* Retz.) 1/3rd part, Vibeetaki (*Terminalia bellerica* Gaertn.) 1/3rd part [These 3 drugs are called Triphala], Yastimadhu (*Glycyrrhiza glabra*) 1 part, Loha basma (Purified fine powdered Fe.) 1 part. Fruits of Amalaki, Hareetaki, Vibeetaki and Yastimdhu were collected dried and fine powdered individually; best quality of loha basma purchased from pharmacy. The powder of components was further mixed in the equal proportion.[2]

OBSERVATION AND RESULTS

Observations & results were recorded as per standard parameters. After 90 days of anjana karma results were evaluated on the basis of parameters. After application of anjana, observations were recorded & patients were reviewed after sitting of Anjana. It is observed that after treatment vision is improved some extent, visual acuity was finger count (FC) with 2 m. colour vision is improved and observing thick bright colours without any effort. But the fundus lesions remained stable and minimization of thickness of pigments since that time. Patient also feeling better in eye strain.

DISCUSSION

Linganasa (Vision loss) is a disease of drustigata roga (diseases of vision) occurred in akshi patala (thin layer of eye ball). There are 6 Patalas in the eyeball; 2 Vartma Patalas and 4 Akshi Patalas. According to Sushruta, the outermost first patala is supported by Teja and Jala, the second one consists of muscles, the third Patala is described as 'Medoashrita' and the fourth Patala is 'Asthyashrita'. Their thickness is equal to 1/5th of the Drishti. According to some scholars, the Prathama Patalas can be taken as Cornea and Aqueous humour; as they are the seat of Tejas and Jala. The 2nd Patalas, which is Mamsashrita, can be taken as Iris and Ciliary body. The 3rd Patala or Medoashrita Patala can be taken as Lens & Vitreous humour. The 4th Patala or Asthyashrita Patala can be taken as Retina, as it is the seat for Linganasha.[3]

Animitha linganasa is one among the bahya netra roga which was mentioned in Susrutha samhita. It's differs from the Sanimitha linganasa in the nidana aspect. If loss of vision developed without any cause (specific eternal cause i.e. nija or agantuja nidana) is called Animitha linga nasa. Animittaja is produced from damage of the drusti by the super natural powers like sight of Sura (God's), Rushi (Sages), Gandharva's (Nymphs) or Great serpents (Mahoruga) or by basvara (seeing very bright / shining objects). In these diseases the external appearances of the eyes are very clean, having the colour of a diamond.[4] Depending upon chronicity and involvement of patalas, disease becomes difficult to treat. In acute condition complications can be preventable for drustigata roga, but not for bahya roga.

Retinitis pigmentosa

Retinitis pigmentosa (RP) reflects a heterogenous group of inherited ocular diseases representing the most recurrent retinal dystrophies, with a worldwide prevalence of 1:3000 to 1:5000.[5] Massof and associate reported on the existence of two general categories as Type 1 RP (display an early diffuse and preferential loss of rod sensitivity (hence early nyctalopia) and later progression and regionalised loss of visual field.) and Type 2 RP have a regionalised and progressive combined loss of rod and cone sensitivity with late difficulty with night vision, typically in adulthood.[4] The inheritance patterns in RP are classified into autosomal dominant, X-linked, simplex and multiple.[5][6][7] Night blindness (Nyctalopia), symmetric, progressive, peripheral visual field loss in eyes, photopsia, colour vision abnormality also can present depend up on. Retinal changes in RP include attenuated retinal vessels, intraretinal bone spicule pigmentation, mottling and granularity of the RPE (retinal

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pigment epithelium), choroidal vessels become visible in advanced stages due to atrophy of RPE and choriocapillaris. Optic disc may be normal in early RP but yellowish white halo can often be seen around and later changed to waxy and pale.[8] High myopia, Astigmatism Posterior sub capsular Cataracts, Keratoconus and Primary open angle glaucoma are more frequent in RP.[9]

RP can be diagnosed with careful refraction, opthalmoscopy, two-color scotopic static perimetry (to evaluate rod and cone retinal sensitivities in different regions of the retina), dark adaptometry (to elevation of the cone segment, rod segment or both to varying degree), Retinal densitometry / Fundus reflectometry (for effective photoreceptor pigment density), ERG (used to identify widespread progressive forms of RP). It can be differentiated by Pseudoretinitis pigmentosa, Uniocular pigmentary retinopathy, and bilateral pigmentary retinopathy. RP is incurable rather than untreatable. Correction of refractive errors, Genetic counselling, night vision devices, Cataract Extraction, Vitamin A supplements can be selected on the base of cause. Berson EL, Rosner B et al recommended that most adult RP patients take vitamin A (retinyl palmitate) in 15,000 IU/day supplements under supervision.[10] Retinal Transplantation, Photoreceptor transplantation, Retinal prosthesis (Artificial silicone retina/ASR), Intravitreal or sub retinal gene therapy may helpful for some improvement in visual function but still remains investigational.[8]

Hareetaki having pancha rasa (except lavana), laghu guna, ruksha, ushna virya, madhura vipaka, tridosha shamana, chakshushya, deepana, rasayana, medhya property.[11] Vibeetaki having kashaya rasa, laghu, ruksha,ushna virya, madhura vipaka, tridoshahara, chakshushya, krimighna, keshya property.[12] Amalaki having pancharasa (except lavana), guru, ruksha, sheeta guna, sheeta virya, madhura vipaka, tridoshahara, chakshushya, vrishya, rasayana property.[13][14] Triphala is reported to exhibit a variety of biological activities, such as anti cancer, anti mutagenic, anti viral, anti oxidant and free radical scavenging activities and is reported to be reno- and hepato-protective.[15][16]

Yasti madhu having madhura rasa, guru, snigdha guna,sheeta virya, madhura vipaka, vatapittahara. Yashtimadhu contains glycyrrhizin acid and ammonium salt [GA] which has proven activity of ulcer healing according to some pharmacological articles.[17] Glycyrrhiza powder has exhibited a marked hepatoprotective action by antioxidant activity of liver against ascorbate dependent oxidation of endogenous polyenic lipids in rat liver.[18]

Usera having tikta, madhura, ruksha, laghu, katu vipaka, seta verya, pachana, stambhana, dhahahara, vishahara, vranahara, meha hara, antioxidant property, anti tuberculosis activity etc. It pacifies vata pitta.[19] Pippali having katu rasa, laghu, snigdha, tikshna guna, anushna sheeta virya, Madhura vipaka, vata kapha shamana,rasayana, vrishya, kustahara property.[20] Saindhava having madhura, lavana rasa, seta verya, laghu, snigdha, tridosa hara, rochana, deepana, avidhahi, hrudya, chakshusya.[21] Ghrita having madhura rasa, guru, snigdha, mridu guna, sheeta virya, madhura vipaka, vata pittahara, medya, rasayana, vrishya,chakshushya, balya, chakshushya, keshya, svarya, shukrala property.[22] Madhu having madhura, kashaya rasa,guru, ruksha, sheeta guna, ushna virya, katu vipaka, pittakapha shamana, chakshushya, lekhaniya, balya property.[23] All the above drugs are chakshushya, rasayana in property, which acts on rasa, rakta, & mamsa dhatu.

CONCLUSION

Retinitis pigmentosa is a disease which not only affects the eyes but it also produces psychological depression. There is no successful treatment of Retinitis pigmentosa.

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To conclude, the results of the present study have empirically indicated that Useradhi rasakriya (Anjana), Saptmrutha loha has protective and effective role in the treatment of Animitha linganasa. There are clearly some limitations of this study. Further study is required in this work.

REFERENCES

1. Susrutha. Sushruta samhita (Shri Dalhanacharya virachita nibhandha sangraha vyakhyaya ([Sanskrit]). Jadavji Trikamji, Sharma PV, editors. 7th ed. Varanasi: Krishnadas Academy; 2005. Sutrastana, 18/52. p.636.
2. Shri Govind Das. Bhaisajya ratnavali. 1st ed. Varanasi: Chaukhamba Sanskrit Prakashan Sansthan; 2006. Sularogadhikara. p. 83-84.
3. Uday kumar. Text book of Shalakya tantra (Illustrated). 1st ed. Varanasi: Chaukhamba Sanskrit Prakashan Sansthan; 2012. p.33.
4. Susrutha. Sushruta samhita (Shri Dalhanacharya virachita nibhandha sangraha vyakhyaya ([Sanskrit]). Jadavji Trikamji, Sharma PV, editors. 7th ed. Varanasi: Krishnadas Academy; 2005. Sutrastana, 12. p.609.
5. Haim M. Epidemiology of retinitis pigmentosa in Denmark. Acta Ophthalmol Scand Suppl. 2002;233:1-34.
6. Massof RW, Dagnelie G, Benzschawel T, Palmer RW, Finkelstein D. First order dynamics of visual field loss in retinitis pigmentosa. Clin Vision Sci. 1990;5:1-26.
7. Heckenlively JR, Boughman JA, Friedman LH. Pedigree Analysis. In: Heckenlively JR. Retinitis Pigmentosa. Philadelphia, PA: Lippincott; 1988;6-24.
8. Yog Raj Sharma, Raja Rami Reddy P, Deependra V Singh. Retinitis Pigmentosa and Allied Disorders. JK Science, 2004;6(3):115-120.
9. Kumara AE, Drock AV, Stone EM. Retinitis pigmentosa and associated disorders. In: Wright KW (ed). Padeatric Opthalmology and Strabismus, St. Louis: CV Mosbey Co. 1995; 131-38.
10. Berson EL, et al. A randomized trial of supplemental vitamin A and Vitamin E supplementation for Retinitis pigmentosa. Arch Ophthalmo1. 1993;111:761-72.
11. Sastry JLN. Dravyaguna vijnana. 8th ed. Varanasi: Chaukhambha Publications; 2015. p.211.
12. Sastry JLN. Dravyaguna vijnana. 8th ed. Varanasi: Chaukhambha Publications; 2015; p.217.
13. Sastry JLN. Dravyaguna vijnana. 8th ed. Varanasi: Chaukhambha Publications; 2015; p.222.
14. Nadakarni KM. Indian Materia Medica, Vol. 1. 3rd ed. Bombay: Popular Publishers; 1999. p.481.
15. Rao NK, Nammi S: Antidiabetic and renoprotective effects of the chloroform extract of Terminalia chebula Retz. seeds in streptozotocin-induced diabetic Rats. BMC Comp Alt. Med. 2006;6:17.
16. Tasduk SS, Singh AK, Salti NK, Gupta DK, Suri K. *Terminalia chebula* fruits prevent liver toxicity caused by sub-chronic administration of refampicin, isoniazid and pyrazinamide (PZA) in combination. Human Exp. Toxicol. 2006;25(3):11-18.
17. Shashikant M Prajapati, Bhupesh R Patel. Phyto-Pharmacological perespective of Yastimadhu (*Glycyrrhiza glabra* Linn.) - A review. International journal of pharmaceutical and biological achieves 2013;4(5): 833-841.
18. Konovalova GG, Tikhaze and Lankin VZ, Anti-oxidant activity of parapharmaceutics containing natural inhibitors of free radical processes. Bull exp boil. Med. 2000;130:658-660.
19. Sastry JLN. Dravyaguna vijnana. 8th ed. Varanasi: Chaukhambha Publications; 2015; p.559.
20. Sastry JLN. Dravyaguna vijnana. 8th ed. Varanasi: Chaukhambha Publications; 2015; p.454.
21. Chunekar KC, Panday GS. Bhavaprakasa Nigantu. 1st ed. Varanasi: Chaukhambha Publications; 2004. p.157.
22. Chunekar KC, Panday GS. Bhavaprakasa Nigantu. 1st ed. Varanasi: Chaukhambha Publications; 2004. p.775.
23. Chunekar KC, Panday GS. Bhavaprakasa Nigantu. 1st ed. Varanasi: Chaukhambha Publications; 2004. p.788.

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