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ADHIMANTHA (GLAUCOMA)-A CONCEPTUAL STUDY

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Abstract: Adhimantha is a disease which has been mentioned by Sushruta as an intense feeling of the eye, wherein eye seems to be being extracted out and churned up along with the involvement of the half of the head in association with specific features of the particular Dosha involved. Glaucoma is a disease which is characterized by raised intra-ocular pressure, optic disc cupping and visual field defect. The present trend of treating glaucoma is hypotensive medical treatment, miotic therapy, carbonic anhydrase inhibitors etc. Ayurvedic treatment includes deepana-pachana, gokshuradi gugglu, sweta parpati etc.

Keywords: Adhimantha, optic disc, carbonic anhydrase, gokshuradi gugglu.

Introduction: *Ayurveda*, the science of life is the very foundation stone of medical knowledge in India. History of Indian medicine reveals that it was Ayurveda which formed very beginning of the art of healing. Ayurveda which dealt extraneously with all the aspects of life and disease. Of the disciplines, Shalakya Tantra is claimed to be the second one in order by Sushruta. Adhimantha has been contributed to negligence or improper management Abhishyanda both from diagnostic as well as treatment point of view. Further the disease Adhimantha presents the features that are similar to those of glaucoma does not define a disease entity but embraces a composite features of pathological conditions which have the common features of their clinical manifestation that are more or less dominated by the raised intra-ocular pressure and its consequences. Adhimantha is of 4 basic types- *Vata*, *Pitta*, *Kapha* and *Rakta* [1].

Involved *Doshas* and *Dhatus:* Prana Vayu, Alochaka Pitta, Tarpak Kapha and Rasa, Rakta and Mamsa. Generally speaking vata regulates retinal nerve function, whereas kapha specifically nourishes the eye and pitta acts to drain aqueous humour.

In *Adhimantha* there occurs *sukshma srotodusti* (*sanga*) and thus *atipravritti* at the level of aqueous humour outflow and at the optic nerve level. At last *vatanari* function hampers leading to optic nerve atrophy. It is difficult to

compare *Adhimantha* with a particular in modern ophthalmology but we can correlate it with a disease Glaucoma.

What is Glaucoma? [2]

- 2nd leading cause of irreversible vision loss (blindness)
- Optic nerve disease
- Characterized by elevated intra ocular pressure, cupping of optic disc, visual field defects.

Lower the I.O.P Slower the Glaucoma Progression $^{[3]}$

- 1. Risk of developing glaucoma with IOP>21mmHg is 16 times higher than with an IOP>16mmHg.
- 2. Asymmetric IOP in an individual pair of eyes is related to the Optic Nerve (ON). Reducing the IOP lowers the risk of ON changes.
- 3. For more 1mmHg rise in IOP, the risk of developing open angle glaucoma increases by 10%.

Risk Factors [4]

- Hyperopia
- Family history
- Old age
- Female gender
- Age related cataract

Types of Glaucoma [4]

• Open angle/angle-closure

- Chronic /acute
- Congenital/acquired

Methods to Diagnose Glaucoma: Glaucoma (POAG) is termed as *sneak thief of sight and silent killer of sight*, since this usually donot produces any symptoms in early stage (while ACG may produce). Diagnostic measures of glaucoma are ^[5]:

- 1. Tonometry
- 2. Ophthalmoscopy
- 3. Perimetry
- 4. Gonioscopy
- 5. Optical coherence tomography (OCT)

The 6 Parameters to Look for Glaucomatous ONH

- Generalised/focal cup enlargement
- Disc haemorrhage
- Neuroretinal rim thinning
- Asymmetric cupping
- Nerve fibre layer loss
- Parapapillary atrophy Progressive

Modern Management of Glaucoma: The medications now available, fall into 6 classes ^[6]

- Beta-blockers
- Prostaglandin analogues
- Alpha agonists
- Carbonic anhydrase inhibitors
- Miotics

Ayurvedic Management of Glaucoma: General line of treatment includes *Agni karma*, *Raktamokshana*, *Tarpana* etc. Treatment protocol: oral medications which can be helpful to treat glaucoma includes-

- 1. Deepana-pachana with Eranda bhrishta Haritaki [7] to remove Ama dosha
- 2. Punarnavashtaka kwath [8]
- 3. Gokshuradi gugglu [9]
- 4. Shweta parpati [10]

These drugs are having Neuro-protective, *Rasayana*, *Shothahara* and Diuretic effects which help to reduce I.O.P.

5. Tarpana and Aschyotana with Shigru Pallava Arka locally. It acts as a good Srotoshodhaka so all kind of vitiated doshas can be subsided and drained out.

Keeping this concept in mind a humble attempt is planned for the management of glaucoma by using a classical way of Neuro-protective and *Shothahara* effects. Therefore Ayurvedic management can be applied to treat glaucoma as it is effective and has minimum hazards.

Conclusion: Glaucomatous optic neuropathy is a slow progressing disease but causes an

irreversible blindness, if left untreated. The current strategy of modern management of Glaucoma is mainly concentrated on lowering IOP. It is well known fact that control of IOP is not only the management strategy of Glaucoma but drugs helping to increase in the perfusion of optic nerve head and having the nerve regenerative adaptability anti-oxidant properties are highly sought after.

Ayurveda gave the concept of *Rasayana* to the world in combating degenerative disorders it has many hidden treasures of drugs formulations which need to be made into evidence based about its efficacy after a proper research protocol to make it to reach worldwide common population.

References

- 1. Shashtri Ambika Data. (2006) Sushrutsamhita— Uttarsthan, Adhyay-6, Chaukhamba Sanskrit Sansthan, Varanasi, p.27.
- 2. http://www.who.int/bulletin/volumes/82/11/feature1104/en/
- 3. Khurana, A.K. (2007). *Comprehensive ophthalmogy*, edition 4th, p.208.
- 4. Khurana, A.K. (2007). *Comprehensive ophthalmogy*, edition 4th, p.210
- 5. Khurana, A.K. (2007). *Comprehensive ophthalmogy*, edition 4th, p.220
- 6. Khurana, A.K. (2007). *Comprehensive* ophthalmogy, edition 4th, p.222
- 7. Sharma, P.V. (1996). Classical uses of medicinal plants, edition 1st, Varanasi, Chawkhamba Viswabharati.
- 8. Shastri Rajeshwar Dutt. (1999) *Bhaishajya Ratnavali Udararogachikitsa*, 40/33, Chawkhambha Sanskrit sansthan, Varanasi, edition 13th, p.532
- 9. Tripathi Bramhananda. (2008). *Sharangdhara Samhita*, Madhyam Khanda 7/84-87
- 10. *Siddha Yoga Sangraha*. (2000). Ashmarimutrakricha adhikara, AFI VOL-2,12:2