

Literature Review of Prognosis of *Sushrutokta Asadhya Netra-Rogas*

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Abstract

Acharya Sushruta has described *netrarogas* and their treatment in *Uttartantra* in first seventeen chapters. *Kriyakalpas* are explained in eighteenth chapter. He has described seventy six *netrarogas* among which fifty two are *sadhya*, seven are *yapya*, and seventeen are *asadhya netrarogas*. For *Sadhya vyadhi* *Acharya* has described treatment and treatment procedure in ten chapters according to dosha. Among these seventeen *asadhya* diseases, four *vataja* diseases are *Hathadhimantha*, *Gambhirika*, *Nimesha*, *Vatahatavartma*. Two *pittaja* diseases are *Hraswajadya*, *Pittasrava*. One *kaphaja* disease is *Kaphastrava*. Four *raktaja* diseases are *Raktastrava*, *Shonitarsha*, *Ajakajata*, *Savranashukla* and four *sannipataja* diseases are *Puyastrava*, *Nakulandhya*, *Akshipakatyaya* and *Alaji*, Two *Bahya linganasha* (*Sanimitta* and *Animitta*). But in dealing with other diseases *Sushruta* has mentioned that *Adhimantha*, if not treated properly or not in time may become *asadhya*. According to *Sushruta* commentator *Dalhana*, among all *Linganasha* only *kaphaja linganasha* is *sadhya*, while other types of *linganashas* are *asadhya*. This study is based on compiling various *asadhya netraroga* described by *Acharya Sushruta*, and comparing them with modern diseases. The aim of study is to find out possible causes of *asadhyatva* of those diseases. The study concluded that *asadhya netrarogas* described by *Acharya Sushruta* are incurable in ancient era due to lack of advanced surgical technologies or poor visual prognosis. Improved surgical techniques made some of them surgically curable, but most of them are yet incurable. We have to re-evaluate the prognosis mentioned by *Sushruta* in modern era with outcome of treatment.

Keywords *Sushrutokta, Asadhyanetraroga, Asadhyatva, Prognosis*



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INTRODUCTION

In *Sushrut Samhita*, *Shalakya tantra* is described in *Uttartantra* by *Acharya Sushruta*. He has described *netrarogas* in first seventeen chapters. In ancient era with limited sources, *Acharyas* had performed detailed observations and diagnosis of eye diseases. Illumination is main source for examination of eye. But at time of *Acharya Sushruta*, he did eye examination just under bright sun light. Details of classification of diseases according to *vitiated doshas* and *sadhyasadhyatva* is given in *Samhita*. Among seventysix *netrarogas*, seventeen are said as incurable. Four incurable *vataja* diseases are *Hathadhimantha*, *Gambhirika*, *Nimesha*, *Vatahatavartma*. *Kaphastrava* is incurable disease due to vitiation of *kapha dosha*. Four *raktaja* diseases are *Raktastrava*, *Shonitarsha*, *Ajakajata*, *Savrana shukla*¹. Four *sannipataja* diseases are *Puyastrava*, *Nakulandhya*, *Akshipakatyaya* and *Alaji*². Two *Bahya linganashas* are incurable diseases. Clinical features of these diseases may be correlated with different modern concepts. Some diseases are incurable even today with advanced techniques and surgical methods. But due to advanced knowledge of anatomy and histology of tissues, knowledge of

physiology, biochemistry of tissue, advanced examination techniques, invention of drugs like antibiotics, steroids, various modes of drug administration, LASER and other surgical techniques; these all factors help in improvement of prognosis of *asadhya* diseases. Here is an effort to re-evaluate the prognosis mentioned by *Sushruta* in modern era with outcome of treatment.

LITERATURE REVIEW

1. *Alaji*³

Doshas: Tridoshas

Sthana: Sandhi

Ayurvedic view: *Alaji* is the advanced stage of *parvani*, included in *asadhya netraroga*. *Alaji* associated with pain, pricking and burning sensation. The difference between *parvani* and *alaji* is in its thickness.

Correlation with modern concept: Features of *alaji* resembles with advanced stage of phlyctenular conjunctivitis, nodular episcleritis, ciliary staphyloma, limbal melanoma.

Possible causes of *asadhyatva*: Plycten, episcleritis, nodular episcleritis are autoimmune diseases and mostly secondary to systemic diseases. Mostly ciliary staphyloma is due to scleral thinning commonly associated with systemic

diseases. Melanoma is malignant condition. This makes prognosis of disease bad. Their irreversibility may be the cause of incurability by Acharyas in the ancient era.

2. *Netrastarva*³

Ayurvedic view: When *doshas* enter the *netrasandhi* through the tear channels they cause painless secretion through *kaninikasandhi*. *Netrasravas* are classified into four types based on nature of the discharge.

a. *puyastrava* b. *raktasrava* c.
Kaphastrava d. *Pittastrava*

a. *Puyastrava:*

Dosha: *Tridosha*

Sthana: *Sandhi*

The suppuration in *netrasandhi* produces variety of pus discharges due to the vitiation of *tridoshas*. As all three *doshas* are involved, it exhibits respective symptoms.

b. *Kaphasrava*

Dosha: *Kapha*

Sthana: *Sandhi*

Sleshmasrava is characterized by white, thick and sticky discharge which is painless.

c. *Raktasrava*

Dosha: *Rakta*

Sthana: *Sandhi*

Raktastrava is characterized by hot blood stained discharge due to vitiation of *Rakta*.

d. *Pitta strava*

Doshas: *Pitta*

Sthana: *Sandhi*

Pittastrava characterized by water like thin and hot discharges of yellowish or bluish colour from the middle of *sandhi*.

Corelation with modern Concept: These all *stravas* can be correlated with different stages of dacryocystitis i.e. acute or chronic dacryocystitis.

Treatment: Along with medication, surgical procedure like DCR, DCT are used for treatment of various stages of dacryocystitis.

Possible causes of *asadhyatva*: In ancient time of *Acharya Sushruta*; due to lack of surgical equipments and other operative techniques, he may include these diseases in *asadhya netraroga*.

3. *Vatahatavartma*⁴

Dosha: *Vata*

Sthana: *Vartmamandala*

Ayurvedic view: *Vatahatavartma* is a condition in which palpebral fissure remains open, the lids lose its power of mobility. Patient will not be able to close the eye completely. Pain may be present or not. *Sandhinichesta* means the *sandhis* of *vartma* may get damaged due to the vitiation of *vatadosha*.

Correlation with modern concept: *Vatahataavartma* can be correlated with lagophthalmos due to seventh cranial nerve i.e. Lower motor neuron type of facial nerve paralysis.

Possible causes of asadhyatva: This is neurological condition with not satisfactory prognosis. Even today with advanced techniques, it is difficult to find out causes of nerve damage and also difficult to treat lagophthalmos. So *Sushruta* described this *vyadhi* as *asadhya*

4. *Nimesha*⁴

Dosha: Vata

Sthana: vartmamandala

Ayurvedic view: When vitiated *vata* permits *sira* called as *nimeshini sira*, responsible for frequent opening and closing of lids. There will be frequent blinking movements. This disease called as *Nimesha*.

Correlation with modern concept: This condition can be correlated with neurological condition with spasmodic twitching of eye lids.

Possible causes of asadhyatva: Due to its neurological etiogenesis, it may have been included in *asadhya vyadhi*.

5. *Shonitarsha*⁵

Dosha: Rakta

Sthana: Vartmamandal

Ayurvedic view: The soft fleshy growth on eye lid with burning and itching sensation. This growth recurs even after repeated excision.

Correlation with modern concept: The condition can be correlated with malignant growth on lids with characteristic feature of on touch bleeding and recurrence after repeated excision.

Possible causes of asadhyatva: *Shonitarsha* is included in *asadhyavyadhi* by *Sushruta* due to its malignancy and its recurrence; Even though surgical and oncological treatment given in modern medicine may change the prognosis partially.

6. *Savrana sukla*⁶

Dosha: Rakta

Sthana: Krishnamandala

Ayurvedic view: The *sanskrit* word *sa-vrana-shukla* means associated with an ulcer of white colour. *Acharya* has given treatment of this diseases but simultaneously he described about *varjaniya savrnasukla*.

The ulcer with following characteristics is incurable.

- Perforation in the center of cornea.
- Covered by granulation tissue.
- Migrating from one place to other.
- Full of blood vessels
- Obstructing the vision

- Involvement of two coats i.e. deep situated.
- Reddish at periphery
- Chronic or long standing.
- Warm lacrimation.
- Nodule resembling *mudga* or feather of *tittira* bird.

Correlation with modern concept:

- Centrally perforated corneal ulcer or corneal fistula.
- Serpiginous ulcer.
- Vascularisation
- Loss of vision
- Chronic or non-healing ulcer
- Collapsed anterior chamber due to perforated ulcer causes warm aqueous fluid come out.

Possible causes of asadhyatva: With above signs and symptoms, it is very difficult to treat the disease. After treatment, inflammatory condition may subside; but hampered vision due to this pathogenesis is important to be cured, which is main cause of bad prognosis of diseases. That is why *Sushruta* may have been included this disease in *asadhya netraroga*.

With advanced science ophthalmologist perform surgeries to treat corneal pathologies like keratoplasty, but it also has its own limitations and risks.

7. Akshipakatyaya⁷

Dosha: Tridoshas

Sthana: Krishna mandala

Ayurvedic view: *Akshipakatyaya* means suppuration of eye in excess. Due to the aggravated *dosha* in *krishnamndala*, inflammatory condition with intense pain in eye is called as *Akshipakatyaya*. In this condition, white colour completely spreads over *krushna mandala*.

Correlation with modern concept: This condition can be correlated with Panophthalmitis.

Possible causes of asadhyatva: In its pathology patient may lose his vision, due to inflammation of all parts of eye. This may be the reason to include this disease in incurable disease.

8. Ajakajata⁸

Dosha: Raktaja

Sthana: Krishnamandala.

Ayurvedic view: *Ajakajata* can be defined as a disease of *krishnamandala* in which there is nodular mass resembling goat's excreta with excessive pain, reddish eye, and sticky discharge.

Correlation with modern concept: *Ajakajata* can be compared with prolapsed iris. Prolapsed iris is complication of corneal perforation and threat to vision and eye.

Causes of asadhyatva: Due to corneal perforation and prolapsed iris; there is complete possibility of loss of vision. So it may incurable condition according to *Sushruta*.

9. *Adhimantha*⁹

A The word *Adhimantha* indicates excessive churning type of pain. If *adhimanthas* if not treated properly or neglected, it may lead to blindness within days as follow.

Kaphaja- 7 days

Raktaja-5 days

Vataja-6 days

Pittaja-instantly

Correlation with modern concept:

Adhimantha can be compared with Glaucoma.

Possible causes of asadhyatva: Glaucoma if not treated properly in early stages, leads to absolute glaucoma or glaucomatous optic atrophy. Even today absolute glaucoma or glaucomatous optic atrophy is irreversible and incurable.

10. *Hathadhimantha*¹⁰

Dosha: Vata

Sthana: Sarvagata

Ayurvedic view: When *Adhimantha* is neglected i.e. not treated properly, *vatadosha* leads to shrinking of eye. It causes very severe pain that is called

Hathadhimantha. The internal *nadi*, related with vision get damaged leading to blindness. When vitiated *Vata* enters the inner *Rupavahasira*, it expels *dristi*, produces *manthanvat vedana*. In other variant of *hathadhimantha* the *prakrupitavatadosha* reduces *bala* and *tejas* of eye leading to contraction of eye like the petals of lotus flower. This is the incurable condition produced by excessively aggravated *vatadosha*.

Correlation with modern concept:

Above condition can be correlated with

- Atrophic bulbi following acute congestive glaucoma
- Absolute glaucoma
- Phthisis bulbi following ciliary staphyloma
- Retinal diseases as complication of raised intra ocular pressure.

Possible causes of asadhyatva: As described above condition causes loss of vision which is irreversible. Nowadays Enucleation, Evisceration or Alcohol injection is treatment of choice in severe condition, but it only relieves pain and does not improve vision. Due to irreversible loss of vision *Acharya* must have mention this diseases as incurable.

11. *Gambhirika*¹¹

Dosha: Vata

Sthana: Drustimandal

Ayurvedic view: The vitiated *vata* gets lodged in *drusti* to produce *gambhirika* with characteristic feature of deformed shape of *drushti*. Due to highly vitiated *vata*, *drusti* get constricted which sinks inward associated with intense pain, that disease is called as *gambhirika*.

Correlation with modern concept: The clinical presentation of pthisis bulbi or endophthalmitis partially fulfills this description. But Angle closure glaucoma secondary to Posterior synachae can be compared with *gambhirika*.

Causes of asadhyatva: Secondary angle closure glaucoma gives bad visual prognosis.

12. Hraswajadya¹¹

Dosha: Pitta

Sthana: Drustimandala

Ayurvedic view: The patient of *Hraswajadya* will see all objects smaller than their normal size and hence name *Hraswajadya*. Patient will see the object during day with difficulty.

Correlation with modern concept: The *doshas* get lodged in *drushtimandala* resulting deformity of *drushti*, making us to believe the involvement of macula in these

diseases. The clinical description of objects appearing smaller is called micropsia. The defective perception of form sense is also observed in degenerative retinal condition and choroid pathological condition. Or it may be simple pressbiopia, in which objects appear small and there is more difficulty in visualizing small objects in evening due to tiredness of ciliary muscles for accommodation.

Possible causes of asadhyatva: As retinal and choroids are deep structures and should examine through instruments like biomicroscope, Ophthalmoscope. In ancient era such equipments were not available. So examination and treatment was not an easy task. That may be the reason of these diseases are incurable at that time. But even with above facilities treatment of retinal disease does not gives satisfactory result even today. If it is pressbiopia, pressbiopic corrective lens were not available in those days.

13. Nakulandhya¹¹

Dosha: Tridoshas

Sthana: Drustimandal

Ayurvedic view: The word *nakula* is indicative of shining and glowing appearance of the eye. Patient perceives

images with deformed colours during day time.

Correlation with modern concept: In this disease pupil is shining like *nakula* i.e. Leuco-coria. It may be due to retinal pathologies e.g. tumors of retina, retinoblastoma. Leuco-coria due to cataract should not be considered here as *linganasha* is described separately.

Possible causes of asadhyatva: The conditions like retinoblastoma, retinal tumors has poor visual prognosis.

14. *Bahya linganasha*¹¹

Dosha: Tridoshas

Sthana: Drustimandal

Sanimitta linganasha and *Animitta linganasha* are two types of *bahya linganasha*.

Several external causes can also produce loss of vision. Sometime the exact cause is known and specific treatment can be undertaken. Sometime causes are not clear; these types of etiological factors are described in *bahya linganasha*.

Sanimitta lingansha: The causes of blindness are known in these diseases. Examples are given in *samhitas* are head injuries, toxic flowers, toxic odours and polluted air. Above etiological factors first

produces inflammatory condition like *Abhishyanda* then vision loss.

Animitta linganasha: The causes of blindness are unknown, so *Acharya* describe it as *bhuta*, *gandharva*, *sura*, solar eclipse, or very bright celestial objects.

Correlation with modern concept: *Sanimitta lingansha* can be compared with traumatic cataract associated with posterior segment pathologies; or complicated cataract due to uveitis caused by toxic gases or chemicals. *Animitta linganasha* can be compared with macular burn by actinic rays of solar eclipse or irradiation of celestial objects.

Causes of asadhyatva: These conditions can be compared with cataract associated with posterior segment pathologies without trauma. Visual prognosis is poor even after cataract extraction.

15. *Linganasha*¹²

According to *sushruta* all *linganashas* are *yapya*. But according to *dalhana*, 5 types of *linganasha* excluding *kaphja* are *asadhya* i.e. *Vataja*, *Pittaja*, *Raktaja*, *Sannipataja* and *parimlayi linganasha*

Vataja linganasha is unstable, rough and of reddish colour.

Pittaja liganasha is of bluish colour or like bell metal.

Raktaja linganasha is like coral or petals of lotus.

Sannipataja lingansha is of mix colour.

Parimlayi linganasha is of reddish colour.

Due to decrease in *dosha* patient may get vision spontaneously.

Correlation with modern concept: These above condition can be correlated with complicated cataract or hyper mature cataract with absorbed cortex or subluxated nucleous, or traumatic cataract.

Possible Causes of asadhyatva: Only *kaphaja lingansha* could be extracted in available surgical techniques of those days. Hard cataract, black cataract, cataract with synechia or uveitis was incurable in those days. But improved surgical techniques made many of them surgically curable in present era. Still have chances of bad visual prognosis after surgery, so these cataracts can be included in *asadhya*.

16. *Nayanabhighata*¹³

Ayurvedic view: Injuries to eye and their management is described in separate chapter by *Sushruta*. In this chapter he clearly mentioned that, if injury is in superficial coats, that is within one or two coats then it is curable or curable with difficulty. But if all coats of eye are involved then these types of injuries are incurable.

Correlation with modern concept: This can be correlated with deeper injuries like retinal detachment or perforating injuries to eye.

Causes of asadhyatva: Due to severe damage to eye, involvement of deeper structure and bad visual prognosis, *Sushruta* may include these injuries as *asadhya*.

CONCLUSION

After detail study of literature review, we can conclude that 17 *asadhya netrarogas* described by *Acharya Sushruta* are incurable in ancient era due to lack of advanced surgical technologies and poor visual prognosis. *Shonitarsha*, *Ajakajata*, *Akshipaktyaya*, *Nimesh*, *Vatahatvartma* are incurable even today. Disease like *Savranashukra* is curable but if there is vision loss due to deeper corneal involvement then visual prognosis is bad. Diseases which show retinal involvement are incurable even today, but improved surgical techniques made many of them surgically curable in present era.

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[Note: all modern concepts are taken from reference no 14]