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REFINING THE ART OF VISION: YOGARATNAKARA'S INSIGHTS INTO *NETRA ROGA CHIKITSA*

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ABSTRACT

The current article presents a comprehensive consolidated knowledge regarding the management of different *netra roga* and also in maintaining the *Netra swastya* as elaborated in *Ayurvedic* classic - *Yogaratnakara*. The text *Yogaratnakara* is known for its practical, clinically oriented approach, compiles extensive *yogas* and *yogya chikitsa* for diverse *netra rogas*. This makes it a significant reference for a *Shalaki* in the perspective as a *Drushti visharada*. This article brings together the valuable descriptions from *Yogaratnakara*, highlighting its *pratyeka yogas*, different *karmas* and *upakarmas*, diseased based *chikitsa*. A wide range of classical preparations such as *kwatha* (decoctions), *churna* (powders), *ghrita* (ghee), *taila* (oil) and *anjana yogas* (collyrium)—are systematically presented along with their method of preparations, indications, contraindications across diverse *netra rogas*. The important procedures including *seka* (irrigation), *ashchyotana* (eye drops), *tarpana* (nourishing eye therapy using ghee), *putapaka* (a procedure like *tarpana* done with extracted juice), *jalouka* (leech therapy), *lekhana* (scrapping) and *bhedana* (incision) are explained with its expected clinical outcome. Even the *Atyayika chikitsa* (emergency management) like *siravyadha* (venesection), *upanaha* (warm poultice) and specialized practices including *pindika* (application of paste on the entire eyes using a cloth), *bidalaka* (application of paste on eye excluding eye lashes) are explained with its practical relevance. Internal medications such as *Triphala kaṣhaya*, *Saptamrita loha*, *Madhukadi loha*, *Shuddha guggulu*, *Patoladi ghrita*, *Vasakadi kwatha* are described with their systemic and local benefits. *Pathyas* (wholesome), lifestyle guidelines and behavioural considerations affecting ocular health—such as *nidra* (sleep), *atapa sevana* (exposure to sunlight), *ratri-jagarana* (awakening at night) and dietary choices—are summarized to present the integrative nature of *Ayurvedic* ophthalmology. Overall, this article establishes *Yogaratnakara* as a crucial, clinically rich source for understanding and treating *netra rogas*, offering a unified reference for contemporary Ayurvedic practice.

KEYWORDS: *Netra rogas, Netra swastya, Netra roga chikitsa – Yogaratnakara.*

INTRODUCTION

The authorship of *Yogaratnakara* is still having a noted difference of opinion. Many *Acharyas* suggest that the text belongs to the 16th–18th century, based on linguistic style and historical references mentioned in the book. The most accepted commentary on this work is the *Vidyotini teeka* which is written by *Vaidya Lakshmipathi Shastri*, which definitely gives valuable insights into the interpretations of the original *grantha*.

The text *Yogaratnakara* is divided into two major sections, ***Purvardha* and *Uttarardha***

Highlights from the *Purvardha*

***Ashtasthana Pariksha* and *Drik Pariksha* –** In the first chapter of the *Purvardha* there is a detailed description of *Ashtasthana Pariksha* elaborating on *drik pariksha* (examination of the eyes) as an essential component of diagnostic evaluation of different local and systemic diseases.

***Lakshanas* based on *Doshic* involvement**

1. *Vata-kupitanetra*: When *vata dosha* is aggravated, the *netra* appears *ruksha* (dry), *dhumra* (smoky), *raudra* (fiery looking) and *chanchala* (unsteady). Sometimes there will be *antaḥ-jvalana* (burning sensation in the eyes).
2. *Pitta-kupitanetra*: Increased *Pitta dosha* can cause the *netra* to exhibit a *deepadweshi* (photophobia), *santapa* (heat) and a distinct *peeta varṇa* (yellowish discoloration).
3. *Kapha-kupitanetra*: Increased *kapha dosha* in *netra* will exhibit *jalardra* (watery), *jyotisha-heena* (decreased lustre), *snigdha* (unctuous) and *manda* (dull in appearance).
4. *Dvandvaja dosha-kupitanetra*: When two *doshas* are aggravated together depending on corresponding involved *doshas*, there will be a combination of the above symptoms.
5. *Tri-doshaja-kupitanetra*: In *tridosha* involvement, the *netra* exhibits *shyamavarna* (blackish discoloration), *nirbhugna* (lustreless), with *tandra* (drowsy), *moha* (confusion), *raudra* (fiery) and *rakta varna* (reddish appearance)

***Arishta Lakshanas* (Fatal Signs):** The text also records several *arishta lakshanas*, indicating poor prognosis:

- If a person is with one eye unusually large and the other very small is predicted to die within three days.
- Additional ominous signs include *jyoti-heenata* (loss of lustre), *ishat-krishna* (slightly blackish hue), *sarakta* or *krishna varna* (reddish or blackish appearance) and a *raudra* (fiery) appearance.
- If one eye becomes *shakti-heena* (devoid of strength) and the other eye shows *bhrama* (instability) and *sphurita taraka* (tremulous cornea), death is expected within a day.
- Individuals with extremely small eyes, along with *sheeta deha* (cold body), *ushna shwasa* or *sheeta shwasa* (hot or cold breath) and *kampana* (tremors) are described as having *asadhya lakshanas*, indicating incurability and imminent danger.

***Ahara* (Diet)**

- While describing about ahara (diet), it is mentioned that tamrachuda (chicken) is said to be drushtida or chakshushya (gives nourishment to eyes), whereas tamakhu (Nicotiana tabacum) is drushti-andhakara (diminishes the vision).
- Under dhanya varga (cereals and pulses), shatapushpa (Indian dill) is netrya (good for eyes) and sarshapa (mustard) is chakshughna (affects eyes).
- In the mamsa varga (meat), mayura mamsa (peacock's meat) and kukkuta mamsa (chicken) are described as chakshushya (good for eyes).
- In siddha-annadi paka (different food preparations), mudga yusha (moong dal soup) is indicated for urdhwajatru roga (diseases above the clavicle).
- Using Swarna (gold) or Rajata (silver) bhojana patra (cooking or eating vessels) is said to be drushtida (improves vision).
- Regarding sheetoshna variguna (cold and hot water qualities), reduced water intake may lead to eye diseases, whereas shruta-sheeta jala (lukewarm water) is beneficial in netra rogas.
- Dadhi (curd) and takra (buttermilk) are described as netra-rujapaha (decreases ocular pain). Ksheera (milk), ghrita (ghee) and navaneeta (butter) are considered chakshushya (good for eyes).
- For netra roga vinashana (to cure eye diseases) and santarpana (nourishing the eyes), the recommended substances are draksha (grapes), dadima (pomegranate), kharjura (dates), sharkara (sugar candy) and laja (puffed rice).
- Pugapaka (a preparation made using areca nuts) is indicated for akshi roga (eyes disease) and draksha paka (a preparation made using grapes) is indicated in netrariti (ocular pain).
- Triphala modaka (a preparation made using triphala) is indicated for urdhwajatru gata roga (diseases above the clavicle).
- Ghrita is generally chakshushya, while mahisha ghrita (buffalo's ghee), aja ghrita (goat's ghee) and purana ghrita (old ghee) used as anjana (collyrium) are noted as timirapaha (blurriness of vision).
- Among oils, *kshauma taila* (oil prepared using silk) is regarded as *chakshushya* (good for eyes).

Under ***rasayana*** (rejuvenation therapy), the benefits include *chakshushya* (good for eyes). *Karma* of *Dhatriphaladi rasayana* is *vimalendriya* (clarity of indriyas). For *netra roga* (ocular diseases), *triphala* (*haritaki*-Indian walnut, *vibhitaki*-bellerica and *amalaki*-Indian gooseberry) is advised as *anupana* (medicine adjuvant).

Concept of *Dinacharya* (Daily regimen)

- Under *nitya pravrittis*-daily regimens, *vega dharana* - controlling natural urges is contraindicated and *prakshalana* – eye wash or foot wash is considered to be *chakshushya* (good for eyes).
- It is advised that *dantadhavana* (brushing the tooth) should be avoided during *netra roga avastha* (afflicted with eye diseases).
- *Sauviranjana* (a type of collyrium) is said to be as a *daily pathya*- can be applied daily.
- *Amalaki* (Indian gooseberry) is *drushti-pushtikara* (strengthens the vision).
- *Padabhyanga* (foot massage) is said to be *netra roga nashaka* (cures eye diseases).
- *Mukha lepa* (facial paste applications) is described as *chakshushya* (good for eyes).
- *Netra abhyanga* (massaging the eyes) is mentioned as *danta roga nashaka* (cures dental diseases).
- In cases of *drushti dosha*, it is advised to pray to Hanuman before food intake.

- *Tambula sevana* (intake of betel leaf) is specifically contraindicated in *netra roga*.
- *Makshika* (honey) and *triphala* (*haritaki*-Indian walnut, *vibhitaki*-bellerica and *amalaki*-Indian gooseberry) are both described as *netramayahara* (cures eye diseases).
- **Under *ratricharya***, it is stated that intercourse with a *rajaswala stree* (menstruating women) can lead to the birth of a blind child.
- *Triphala kashaya* (decoction prepared by adding (*haritaki*-Indian walnut, *vibhitaki*-bellerica and *amalaki*-Indian gooseberry), is used for *netra prakshalana* (washing the eyes) and *kavala* (holding the decoction in oral cavity) is good for eye diseases, oral cavity disorders and jaundice.
- After meals, *bhuktwapanitala* (after having dinner and washing hands one has to touch his eyes with the hands) measures has to be followed.

Under *dhatu varga* (minerals), *swarna* (gold) is said to be *netra pathya* (good diet), *kamsya* (bronze) is *chakshushya* (good for eyes) and *ashuddha swarna makshika* (impure pyrite) causes *andhya* (blindness). *Srotoanjana* (antimony) and *karpura* (camphor) are also described as *chakshushya* (good for eyes).

- While explaining the ***shodhana*** (detoxification procedures), *vamana* (emesis) is contraindicated in *timira* (cataract?), while *virechana* (purgation) is indicated in different *akshi rogas* (eye diseases) and is described as *indriya bala prada* (strengthens the vision). *Nasya* (nasal medication) is said to be *akshirogahara* (cures different *netra rogas*). *Shirobasti* (a type of *murdhni taila*) is noted to relieve *akshi roga* (ocular diseases). *Shadbindu taila* is described as producing *suparna drushti* (eagle's vision).

It is explained that *tandra* (drowsiness) leads to *indriya gourava* (heaviness of eyes) and klama (fatigue) results in *indriya prabhadhakata* (affects the normal functioning of eyes).

Under ***jwara*** (fever), the *purvarupa* (prodromal symptoms) is *nayanaplava* (watering of eyes) and the *rupa* (symptoms) is *nayana daha* (burning sensation in eyes). In *pittaja jwara* (fever due to *pitta dosha*), the eyes appear *peeta* (yellowish in colour) and in *kaphaja jwara* (fever due to *kapha dosha*), they appear *shukla* (whitish in colour).

- *Chetanakaraka anjana* is prepared using *shigru beeja* (seeds of drumstick), *gomutra* (cow's urine), *krishna maricha* (black pepper) and *saindhava* (rock slat).
- For *tandra* (drowsiness), the suggested remedies are *anjana* (collyrium) prepared by *maricha* (pepper), *ashwalaala* (horse saliva), *madhu* (honey) and *kasturi* (musk) and *turangalaala* (horse saliva) and *manashila* (realgar) is beneficial.
- For *bhugna netra* (injured eyes), a decoction of *daruharidra* (Indian barberry), *triphala* (*haritaki*-Indian walnut, *vibhitaki*-bellerica and *amalaki*-Indian gooseberry), *patola* (sponge gourd), *rajani* (turmeric) and *nimba* (neem) is recommended.
- *Chandana bala laksha taila* is useful in *netra daha* (burning sensation of eyes).
- *Sevanti paka, Laghu malini vasanta* and decoction prepared from one *pala shunti* (ginger) with *madhu* (honey) are also indicated in *netra roga*.

While explaining ***arshas*** (haemorrhoids), it is mentioned that in *vataja arshas* the patient will be having *krishnaksha* (blackish discoloration in eyes), whereas in *pittaja arshas* the eyes appear *harita* (greenish), *peeta* or *haridra* (yellowish).

In ***visuchika*** (a type of gastro-intestinal disorder), an *anjana yoga* (collyrium) consisting of *vyosha* (*shunti*-ginger, *maricha*-pepper, *pippali*-long pepper), *karanjaphala* (Pongamia pinnata), *haridra* (turmeric) and *matulunga* (Citrus medica) is mentioned.

In ***pandu*** (anaemia), the symptom includes *shunakshi* (swelling in the orbit region).

In ***kamala*** (jaundice), the eyes appear *haridra netra* (yellowish discoloration in eyes) and in ***panaki*** (Chronic jaundice), there will be *netra panduta* (whitish discolouration in eyes).

In ***rajayakshma*** (tuberculosis), the *purvarupa* (prodromal symptoms) is described as *shuklaksha* (whitish discoloration in eyes) and this condition is considered *asadhya* (incurable).

In ***shwasa*** (dyspnoea), *vibranta lochana* (distorted vision) is seen in *maha shwasa* (a type of dyspnoea) and *urdhwa drushti* (eye balls will move upwards) is noted in *urdhwa shwasa* (a type of dyspnoea).

In ***apasmara*** (psychological disorders), *peeta netra* (yellowish discoloration in eyes) is seen in *pittaja apasmara*, while *shuklaksha* (whitish discoloration in eyes) is observed in the *kaphaja* type. Among the *asadhya lakshanas* (incurable symptoms) of *apasmara* (psychological disorders), *netrasya viturnana* (ocular motility will be affected) is included.

The treatment includes *anjana yogas* (collyrium preparations) like *yashtyawadi anjana* and *manohwadi anjana* are described.

In ***vatavyadhi*** (diseases caused by *vata dosha*), under ***apatantraka*** (Opisthotonus), symptoms like *drushti roga* (disorders of vision) and *stambha* (stiffness in eyes) are mentioned.

- In ***ardita*** (facial palsy), *netra gharshana* (foreign body sensation in eyes) is listed as a *nidana* (causative factors), the *rupa* (symptom) is described as *netra vaikruta* (abnormality of eyes), and the

purvarupa (prodromal symptom) as *netra avila* (watering of eyes).

- Among ***shadasheeti gunas***, *bhru roga* (disorders of eye brows) is mentioned.
- *Netra tarpana* (nourishing ocular therapy) is indicated in *ksheenendriya* (decreased vision).
- *Bruhat manjishtadi kashaya* is said to be beneficial in *netra roga*.

UTTARARDHA

- *Ashruvega dharana* (suppression of tears) leads to ***udavarta*** (reverse movement of vata) and can cause *nayanamaya* (disorders of eyes). Symptoms of *udavarta* (reverse movement of *vata*) include *indriya daurbalya* (weakness of sense organs).
- *Nidra nigraha* (suppression of sleep) is said to cause *akshiroga* (eye disorders).
- Aggravated *vayu* is explained to obstruct the movement of *ashru* (tears).
- In ***krimija hridroga*** (a type of heart disorders), the eyes appear *shyava netra* (blackish discoloration of eyes).
- In ***bahumutra prameha lakshana*** (chronic diabetes mellitus), *netropadeha* (sticky eye discharge) is mentioned.
- In ***pittaja udara*** (abdominal disorders caused by *pitta dosha*), the eyes appear *peeta netra* (yellowish discoloration in eyes).
- In ***shota purvarupa*** (in prodromal symptom of swelling), *davathu* (burning sensation) is described and in *pittaja shotha* (a type of swelling caused by *pitta dosha*), *akshi roga* (eye disorders) is included.
- It is stated that ***shleepada*** (elephantiasis) can occur in the eye as well.
- In ***sadyovrana*** (a type of injury), *bhinna koshta* (punctured wound) presents with *akshi rakta* (congestion), while *asadhya koshta bheda* (incurable wound) shows *rakta netra* (Sub-conjunctival haemorrhage).
- In ***marma viddha*** (injury to vital points), *indriya daurbalya* (weakness to sensory organs) is observed.
- In *shelutwagadi yoga*, *akshi daha* (burning sensation in eyes) is mentioned.
- If the eyes burn due to the falling of *akshaksheera*, *gavya sarpi* (cow's ghee) is used for *aschyotana* (eye drops).
- In ***asthimajjagata kushta*** (a type of skin disease), *akshiraga* (redness of eyes) is seen and in *asadhya kushta* (incurable type of skin disease), the symptom is *rakta netra* (redness of eyes).
- In ***roga sankramana*** (epidemic diseases), *abhishyanda* (conjunctivitis) is considered as *sankramika*.
- In ***sheetapitta purvarupa*** (prodromal symptoms in urticaria), *rakta lochana* (redness of eyes) is observed.
- In ***vataja amlapitta*** (acid dyspepsia), there is *tama darshana* (blurriness of eyes).

Under ***masurika***: The *purvarupa* of *masurika* (prodromal symptoms of chicken pox) includes *netra roga* (eye diseases) and in *pittaja masurika* (chicken pox caused by *pitta dosha*), *akshipaka* (suppuration of eyes) is seen. It is stated that red eye is *asadhya* (incurable) in *masurika* (chicken pox). *Chikitsa* includes *seka* (irrigation procedure to eye) is done using a *kwatha* (decoction) of *yashti* (Glycyrrhiza glabra) and *gaveduka* (Adlay millet). For *lepa* (application of paste), *yashti* (Glycyrrhiza glabra), *triphala* (*haritaki*-Indian walnut, *vibhitaki*-bellerica and *amalaki*-Indian gooseberry), *murva* (Marsdenia tenacissima), *daru haridra* (Berberis aristata), *ushira* (*Vetiveria zizanioides*), *lodhra* (Symplocos racemosa), *manjishta* (Rubia cordifolia) and *neelakamala* (Nymphaea nouchali) are used and these can also be used as *aschyotana* (eye drops). For *anjana (collyrium)*, *jambukamamsa swarasa* is mentioned as both preventive and curative. Another *lepa* (application of paste) described is *bahubarakalkala rasa lepa*. If *kleda* (discharge) is present, *panchavalkala* (Ficus religiosa, Ficus benghalensis, Ficus racemosa, Ficus microcarpa, and Thespesia populnea) dusting or *gomaya churna* (cow dung powder) is recommended. A *lepa* (application of paste) made of *nimba* (Azadirachta indica), *mukta* (Pluchea lanceolata), *aparajita* (Clitoria ternatea), *bimbi* (Coccinia grandis) and *vetasa twak* (Salix caprea) is also indicated. *Hingwadi kshara taila* is used in *bhrushula* (pain in eyebrow).

In ***raktaja pratishyaya*** (rhinitis caused due to *rakta dosha*), the *lakshana* (symptoms) includes *tamrakshi* (coppery discoloration in eyes). The *upadravas* (complications) of *pratishyaya* (rhinitis) include *andhya* (blind) and *ghora nayanamaya* (severe eye diseases). In ***pittaja shiro roga*** (headache due to *pitta dosha*), the symptom is *akshi dahyati* (burning sensation in eyes).

In ***anantavata*** (trigeminal neuralgia), *akshi shula* (ocular pain) and *bhrushula* (Pain in eyebrows) are mentioned.

In ***ardhavabhedaka*** (migraine), *akshi shula* (ocular pain) is present and the *upadrava* (complication) is *nayanavinashana* (destroys eyes).

Under ***bala roga*** (paediatric disorders), in ***kukunaka*** (ophthalmia neonatorum), which is due to *ksheeradosha* (vitiation of breastmilk), the symptoms include *netravartma kandu* (itching in eyelids), *srava* (watering), *shira*, *akshi*, *lalata*, *nasa* and *kanta gharshana* (rubbing head, eyes, frontal area, nose and throat), along with *narkaprabha* (difficult to see sunlight) and *difficulty in opening and closing the lids.* In the treatment of *kukunaka* (ophthalmia neonatorum), a *lepa* (application of paste) of *triphala* (*haritaki*-Indian walnut, *vibhitaki*-bellerica and *amalaki*-Indian gooseberry), *lodhra* (Symplocos racemosa), *Punarnava* (Boerhavia diffusa), *shunti* (ginger) and *bruhati dwaya* (Solanum indicum and Solanum surattense) is mentioned.

Another *lepa* (application of paste) made of *vyosha* (*shunti*-ginger, *maricha*-pepper, *pippali*-long pepper), *bringaraja* (Eclipta alba), *manashila* (realgar), *haratala* (orpiment) and *karanjabeeja* (seeds of Pongamia pinnata) is applied to the eyelashes for *kandu* (itching).

When *kapha* vitiates breast milk, the symptom observed is *shunakshi* (swelling in the orbit).

In ***talukantaka*** (a throat disorder), *akshiruja* (ocular pain) is mentioned.

In ***graha***, the features include *bhru peeda* (pain in eyebrows), *urdhwa drushti* (affected ocular motility?) and *rundita* (crying).

Under ***Skanda*** and ***Naigamesha***, *urdhwa drushti* (affected ocular motility?) is noted.

Asadhya lakshana (incurable symptoms) includes *netra stambhana* (ocular stiffness).

Under *Visha* (poison)

- In *visharahita* (absence of poisoning), the state is described as *prasanna indriya* (clarity of sense organs).
- *Shirishamarichadi anjana* is prepared using *shirisha pushpa rasa* (liquid extract from flowers of Albizia lebbeck**)** and *shweta maricha* (white pepper), given *bhavana* for one week and this is used as *anjana* (collyrium), *nasya* (nasal medication) and internally also.
- In *kritrima visha* (artificial poison), the symptom is *peeta chakshu* (yellowish discoloration).
- *Garudanjana* is mentioned as *visha chikitsa*.

***Netrarogadhikara* (chapter dealing with ocular diseases)**

Firstly, the author describes *Netra Pramana* (measurement of eye), stating that the eye measures *dwayangula* (2 *angulas*) and other anatomical aspects as explained by Acharya Sushruta. A total of 78 diseases of the *netramandala* are mentioned, including 12 + 2 *drishti rogas* (disorders related to vision), 4 *krishna rogas* (disorders of cornea), 9 *sandhi rogas* (disorders of junctional areas), 11 *shukla rogas* (disorders of sclera and conjunctiva), 17 *sarvagata rogas* (disorders of entire eye), 21 *vartma rogas* (disorders of eyelids) and 2 *pakshma rogas* (disorders of eyelashes). Acharya Sushruta, however, explains 76 diseases based on the involvement of *doshas*.

The *nidana* and *samprati* is almost similar as per Acharya Sushuta. The ***nidana*** (causative factors) of *netra roga* (ocular disorders) includes exposure to *ushnabhitapta* (exposure to sunlight) and similar factors, with additional causes like excessive intake of liquid foods, suppression of natural urges of urine and flatus, heat exposure, excessive alcohol intake, seasonal irregularities, stress, and severe exertion. The other *nidanas* (causative factors) includes improper use of *gandusha* (gargling), *anjana* (collyrium) and *nasya* (nasal medication), which provoke *kapha* and lead to the 76 eye disorders described as difficult to cure.

The ***samprapti*** (pathogenesis) highlights the involvement of vitiated *doshas* afflicting the *netra bhaga*, especially the doshas affected in *urdhwa kaya* (head?).

The author starts explaining the diseases from ***drishti mandala*** (retina?). It is compared to *masuradala* (masur dal) and the explanation of *patala* (layers) is provided in detail. It is mentioned that when a single *patala* is vitiated, the vitiation gradually spreads to all *patalas*. The involvement of *Prathama patala* (first layer), *Dwitiya patala* (second layer), *Tritiya patala* (third layer) and *Chaturta patala* (fourth layer) is noted. Six conditions are listed under *linganasha* (complete loss of vision) and other diseases includes *divandha* (day blindness), *shlema-vidagdha drishti* (retinitis pigmentosa), *naktandhya* (night blindness), *dhumadarshi* (smoky vision?) and *hriswajadya* (micropsia/any retinal disorders). In *hriswajadya*, there will be *drishtimadhya dosha*, and hence far and larger objects appear smaller and during the night, the *pitta* dosha decreases and there will be normal vision. *Yapya* (manageable) conditions include all forms of *kacha* (cataract) and *nakulandhya* (retinitis pigmentosa). *Upsarga*, *gambhira*, and *hriswajadya* (diseases related to posterior segment) conditions are to be avoided during management.

Krishnamandala rogas are *savrana shukra, avrana shukra, akshipakatyaya* and *ajakajata.*

Shuklamandala rogas are *prastari arma, shukla arma, kshataja arma, adhimamsa arma, snayu arma, shuktika, arjuna, pishtaka, sirajala* and *sirapitika.*

Vartmamandala rogas are utsangini, kumbhika, pothaki, vartma sharkara, arshovartma, shushkaarsha, anjananamika, bahalavartma, vartmavabandha, klishtavartma, vartmakardama, shyavavartma, praklinnavartma, aklinnavartma, vatahatavartma, vartmarbuda, Niesha, shonitarsha, lagana, bisavartma and *kunchana.*

Pakshmamandala rogas are *pakshmakopa* and *pakshmashata.*

Sandhigata rogas are *puyalasa, upanaha, srava, parvani, alaji* and *jantugtanthi.*

Samasta netra rogas are 4 types of *abhishyanda, 4 types* of *adhimantha, sasopha akshipaka, asopha akshipaka, hatadhimantha, anilaparyaya, shushkakshipaka, anyatovata, amladhyushita, sirotpata* and *siraharsha.*

***Netra roga chikitsa* (treatment for eye diseases)**

The state of *ama* (undigested material) and *nirama* (without *ama*) in *netra* disorders is explained. In *sama*

netra roga, treatments include *seka* (eye irrigation), *langhana* (fasting) for four days, *swadu-tikta ahara* (sweet-bitter taste food), *lepa* (application of paste) and *bhaspa sweda* (steam), all serving as *ama pachaka* (digestive aids) measures. During this period, *anjana* (collyrium), *sarpi pana* (intake of ghee), *kashaya pana* (intake of decoctions), heavy meals and *snana* (bathing) are avoided. *Langhana* (fasting) is essential in conditions like *akshikukshi bhava roga* (diseases of eye and abdomen).

Among the 76 diseases, those arising from *abhishyanda* (conjunctivitis) and associated with *kapha* respond well to *langhana*, combined with *mudga rasa-audana* (food preparation using greengram). In *sama avastha*, *anjana* (collyrium) and *kashaya pana* (decoction) are contraindicated. In *abhishyanda* (conjunctivitis), the *sama* phase continues for four days.

Seven types of *kriyakalpa* (ocular therapies) are described as *seka* (eye irrigation), *aschyotana* (eye drops), *pindi* (application of paste using cloth over entire eye), *bidalaka* (application of paste of medicines excluding eye lashes), *tarpana* (nourishing eye therapy with ghee), *putapaka* (filling the eyes like *tarpana* using liquid extract), *anjana* (collyrium).

Drushtimandala roga chikitsa (treatment of vision related disorders)*: Timira* (cataract) is considered difficult to cure but it is treatable. It is regarded as the root cause of *drishti vinasha* (loss of vision).

In ***vataja timira***, *snigdhadi* (unctuous) therapies are preferred, including *dashamula ghrita*, *rasnadi ghrita* and *triphala* preparations.

In ***pittaja timira***, cooling therapies are used, such as *jeevantyadi ghrita*, *triphala ghrita* and *siravyadha* (venesection), along with internal administration of *ela* (Elettaria cardamomum), *trivrit* (Operculina turpethum), *saindhava* (rock-salt) and *madhu* (honey). Preparations like *baladi ghrita* and *sarivadi varti* are also indicated.

In ***kaphaja timira***, *teekshna kriyas* (strong therapies) are needed.

Siravyadha: Before *siravyadha* (venesection), *ghrita* (ghee) processed with *triphala* (*haritaki*-Indian walnut, *vibhitaki*-bellerica and *amalaki*-Indian gooseberry) and *chavya* (Piper retrofractum) is administered.

Marichyadi nasya, *nepaladi varti* and *anjana* are advised.

In ***dwandwaja timira*** (cataract caused by two *doshas*), the involvement and intensity of all *doshas* are considered.

Shigrupallava yoga is beneficial in *Vata, Pitta, Kapha* and *Sannipata* types.

General management of *timira* includes proper *anjana vidhi*. ***Anjana*** is administered only when *doshas* are fully matured (*sampakwa dosha*). Three types are described: *gutika anjana*, *rasanjana* and *churna anjana*, performing *snigdha* (unctuous type), *ropana* (healing type) and *lekhana* (scraping type) actions respectively. The dose, method of using the *shalaka* (applicator), application sequence and contraindications are elaborated. A special *Naga shalaka*, repeatedly heated and dipped in *triphala* (*haritaki*-Indian walnut, *vibhitaki*-bellerica and *amalaki*-Indian gooseberry), *bhringaraja* (Eclipta alba), *shunti* (ginger), *sarpi* (ghee), *gomutra* (cow's urine), *madhu* (honey) and *ajaksheera* (goat's milk) is recommended for *lekhana* (scraping type of collyrium). Application begins with the left eye, followed by the right. Additional formulations include *muktadi mahanjana*, *nayanashananjana*, *chandrodaya varti*, *chandraprabha varti* and *shashikala varti*. Other preparations include *nayanamruta anjana*, *ropani kusumika varti*, *darvyadi anjana*, *shankadi vati* for timira, *punarnavadi anjana*, *phalanjana*, *katakaphaladi yoga*, *pippalyadi anjana*, *gunjamuladi anjana*, *tulasyadi yoga*.

The *lochanashulaghni pottali* is prepared by rubbing *kritalaja* (puffed rice), *sourashtra* (mineral), *ahiphena* (Papaver somniferum), *sindhura* (Bixa orellana) and *lodhra twak* (Symplocos racemosa) with *cameli pushpa* juice (Camellia sinensis) over a *tamra patra* (copper vessel) and used for fomentation on the eyelids for pain relief.

Under ***kwatha*** (decoctions), preparations such as *vasadi kwatha* are recommended for *timira*, other decoctions are *triphala kashaya* and *chitrakadi kwatha*.

Under ***churna*** (powders), *saptamruta loha* is advised in the evening with *madhu* (honey) and *ghrita* (ghee) for twenty-one days without dietary restrictions. Other powders include *madhukadi loha churna*, *shatavaryadi churna* and *triphaladi churna*.

Under ***ghrita*** **(**ghee**)**, preparations like *vibhitakadi ghrita*, *mahatriphaladi ghrita*, *triphaladya ghrita*, and *laghu triphala ghrita* are used.

Under ***taila*** (oil), *bhringaraja taila* is explained.

Kacha (a stage of cataract) is treated with leech therapy followed by *vrana nashaka* (wound healing) procedures. Under *anjana yoga* (collyrium), a combination of *maricha* (1/2 *shana*) (pepper), *pippali* (2) (long pepper), *samudraphena* (2) (dried cuttlefish bone), *saindhava* (rock-salt) (1/2), and *souvira* (9) (antimony) is powdered and applied as *anjana* (collyrium) on the day of *chitra nakshatra*. Other preparations include *meshashringadi anjana* and *shilarasadi rasa kriya*.

For ***pitta-vidagdha drushti*** (day blindness?), *rasanjanadi anjana* and *kashmaryadi anjana* are suggested.

In ***shleshma-vidagdha drushti*** (retinitis pigmentosa), *harenukadi anjana* is used.

For ***divandha*** (day blindness) and ***ratrandhya*** (night blindness), *nalinadi anjana* and *nadijaadigutika anjana* are recommended.

In ***ratrandhya*** (night blindness), formulations such as *rasanjanadi anjana*, *kanadi anjana*, *karanjadi anjana* and *dadhi-maricha anjana* are prescribed. *Vachadi kwatha* is taken after proper digestion.

In ***suryadagdha drushti*** (injuries caused by exposure to sun/solar eclipse), cooling measures and anjana made with *swarna* (gold) and *goghrita* (cow's ghee) is useful.

Krishnagata rogas chikitsa (treatment of corneal diseases): It includes separate measures for *savrana shukra* (corneal ulcer) and *sadaha shukra* (corneal ulcer with burning sensation).

- In ***savrana shukra*** (corneal ulcer), *shadanga guggulu*, *jalouka* (leech therapy) and *trivritadi ghrita* are advised.
- In ***sadaha shukra*** (corneal ulcer with burning sensation), *yashtyadi aschyotana*, *lamajjakadi anjana* and *chandanadi varti* are used.
- In ***avrana*** conditions (corneal opacity), preparations like *jatyadi anjana*, *dhatriphaladi sechana*, *karanjana varti*, *samudraphena varti*, *chandrodaya varti*, *vata-ksheera-rasanjana*, *pippalyadi anjana*, and four *yogas* using *shuddha swarna makshika* (copper and iron pyrite), *madhuka swarasa* (Madhuca longifolia), *vibhitaka phala majja* (fruit kernel of Terminalia bellirica), or *saindhava* (rock-salt) with *madhu* (honey) are indicated. *Kukkutandhanjana*, *lohadi guggulu*, *patoladi ghrita* and *krishnadi taila* are also used.
- In ***akshipaka*** *chikitsa*, *ervaru* (Cucumis sativus) and *pundarika* (Nelumbo nucifera) are taken in equal quantity, mixed with sixteen parts milk and sixty-four parts water, reduced to *ksheeravashesha* (16 parts), and used as eye drops for *raga* (redness), *ashru* (watering) and *shula* (pain).
- In ***ajaka*** (staphyloma), where symptoms begin in the eye, ear, brow, cheek and temple regions with hot tears and heavy discharge, the condition is considered *asadhya* (incurable). When it grows spontaneously but slowly, it is *sadhya* (curable), especially if hard and of long duration. *Siravyadha* (venesection) followed by *virechana* (purgation) *trivrit churna* (powder of Operculina turpethum) is advocated. *Vatahara dravya-siddha ghrita* (ghee prepared by *vata* pacifying drugs) for *seka* (irrigation), *pana* (drinking), *abhyanga* (massage) and *bhojana* (food). *Vatapatra putapaka* is used as *aschyotana* (eye drops). *Goasthi prayoga* (cow's bone) involves rubbing cow bone on a bronze plate with warm water and using the obtained liquid for *purana* (filling the eyes in the form of *Tarpana*). *Shambuka mamsa anjana* and *saindhava yoga anjana* are also mentioned. *Shashakadi ghrita* is included.

Shuklaja netra rogas (diseases of conjunctiva and sclera): ***Pishtaka*** (a disease of conjunctiva) is described as a condition formed by *shleshma-maruta kopa* (increased *kapha* and *vata dosha*), producing a raised, dough-like mass in the *shukla mandala* (conjunctiva), resembling *malkata darsha* (dusky mirror appearance).

Five types of ***arma*** (pterygium) are listed—*dadhinibha* (appears like curd), *nila* (blue), *rakta* (red), *tanu* (thin) and *ashu* (fast growing), all resembling *shukra*. Treatments include *krishnadi putapaka anjana* for *lekhana* (scraping), *pippalyadi gutika anjana*, *marichyadi lepa*, *pushpakshadi rasakriya* and general *pittabhishyanda chikitsa* (treatment given in conjunctivitis caused by *pitta dosha*).

- In ***balasa*** and ***pishta***, *Raktamokshana* (bloodletting) is performed along with measures used for *kaphaja abhishyanda*. Additional *anjanas* include *kayaphala*, *vyosha*, *nimbu rasa*, and *rasayana*.
- In ***arjuna***- *sharkara*, *mastu* and *kshoudra* is used for *aschyotana* and *anjana* (collyrium) includes *shankadi anjana*.

Vartma-pakshmagata roga chikitsa (treatment of diseases of eye lashes and eye lids): Disorders of *vartma* (eyelids) and *pakshma* (eye lashes) are elaborated, following Sushruta's framework. *Kunchana* (blepharospasm) results from *vata* and *mala* accumulation, leading to narrowing of the eyelids.

The treatment includes *lekhana* (scraping) is used for conditions like ***utsangini*** (chalazion), ***bahala*** (inflammatory eye disorders), ***kardama*** (lid odema), ***shyava*** (blackish discoloration of eye), ***arsha*** (muscular growth on lids), ***klishta*** (inflammatory eye disorder), ***pothaki*** (trachoma) and ***kukunaka*** (ophthalmia neonatorum). *Bhedana* (incision) is indicated for ***shotha-yukta bisavartma*** (inflammatory eye disorders), for ***granthi*** (odema) caused by *krimi* (organisms) and in ***anjananamika*** (external hordeolum).

- In ***anjananamika*** (external hordeolum), the swelling is fomented, opened and drained. *Manasheela* (arsenic disulfide), *nata* (Tagara valeriana), *sindhotta* (rock-salt) and *kshoudra* (honey) are used as *anjana* (collyrium). If the swelling does not rupture, *shastra* (an instrument) is used, followed by *rasanjana* with *madhu* (honey) and *deepashikodbhava anjana*. In *Anjananamika* (external hordeolum), *sweda* (fomentation) is applied using a lubricated finger followed by *jalouka* (leech therapy). For three days, *durvadi anjana* is used and after the itching reduces in two to three days, *rasanjana* with *vyosha* is applied.
- In ***lagana*** (chalazion), *rechanadi yoga* is indicated.
- In ***bisagranthi*** (a type of eye swelling), *swedana* (fomentation) is performed and once the cavity

ripens, it is cut open and filled with *saindhava* (rock-salt).

- In ***klinna vartma*** (painless lid swelling), *ala* (yellow orpiment), *daruharidra* (Indian barberry), *vacha* (Acorus calamus) and *tulasi swarasa* (extraction of Holy basil) are used as *anjana* (collyrium) and also *rasanjana* is useful.
- In ***pillaroga*** (chronic eye diseases), caused by *pitta* and *shleshma*, repeated *lekhana* (scrapping) is followed by *raktamokshana* (bloodletting), then repeated *virechana* (purgation). Other treatments include *raktamokshana* (bloodletting) followed by *vamana* (emesis) and then *anjana prayoga* of *manasheeladi*, *devadarvayadi*, *guhamuladi* and *tuttadi anjana*.
- In ***pakshma roga*** (eye lash disorders), the heated *shalaka* (an applicator) is used to cauterize the lashes, causing their fall. A *lepa* (application of paste) of *pushpakasisa churna* with *tulasi swarasa*, prepared in a copper vessel and stored for ten days, is applied.

Sandhigata roga chikitsa (treatment of diseases of junctional areas): The *puyalasa* (dacryocystitis) treatments include *siravyadha* (venesection), *lepa* (application of paste), *upanaha* (hot fomentation using lepa) and *netrapaka chikitsa* (treatment of suppurative eye disorders), using *saindhava* (rock-salt), *kasisa* (ferrous sulphate) and *ardraka swarasa* (juice of ginger) as *anjana* (collyrium).

- In ***upanaha*** (dacryocyst), ***alaji*** (swelling at limbus) is treated by *lekhana* (scrappig), *lepa* (application of paste) or *chedana* (excision).
- ***Netra srava*** (epiphora) is managed with use of *triphala kashaya* based on *doshic* vitiation, intake of *triphala Kashaya* (decoction made of *Triphala*) along with *madhu* (honey) and *ghrita* (ghee) and *siravyadha* (venesection). *Pathyadi varti* and *Karpasadi anjana* is also used.
- In ***parvani*** (marginal corneal disease), the swelling is fomented, lifted up, one-third mass is cut and then area is rubbed with *saindhava* (rock-salt) and *madhu* (honey).
- In ***jantugranthi*** (blepharitis), a combination of *triphala (haritaki-Indian walnut, vibhitaki-bellerica and amalaki-Indian gooseberry)*, *guduchi* (Tinospora cordifolia), *kasisa* (copper sulphate), *saindhava* (rock-salt) and *rasanjana* is prepared as *rasakriya* for *pratisarana* (rubbing the lid margins).

Samasta netra roga chikitsa (treatment in diseases affecting the whole eye): In ***vatabhishyanda*** *chikitsa* (conjunctivitis caused by *vata dosha*), *seka* (irrigation) with *eranda* (castor) is used. The same can be used for ***vataja adhimanta*** (glaucoma caused by *vata dosha*). For ***vataja abhishyanda*** (conjunctivitis caused by *vata dosha*) and ***vata paryaya*** (trigeminal nerve atrophy), combinations of *ajaksheera* (goat's milk) with *saindhava* (rock-salt) or with *daru haridra* (Indian barberry) and *saindhava* (rock-salt) are applied. *Bilwadi aschyotana* is used for ***vataja abhishyanda*** (conjunctivitis caused by *vata dosha*), along with *nimba patradi putapaka rasa purana*, *erandapatradi pindika* and *haridradi anjana*.

In ***pittaja abhishyanda*** (conjunctivitis caused by *pitta dosha*), cooling measures such as *chandanadi seka*, *nimbapatradi aschyotana*, *draksha-madhuka aschyotana*, *dhatri pindika* and *chandanadi lepa* and *bidalaka* are used.

For ***kaphaja abhishyanda*** (conjunctivitis caused by *kapha dosha*), treatments include *langhana* (fasting), *sweda* (fomentation), *nasya* (nasal medication), *tiktadi bhojana* (bitter food articles), *tikshna virechana* (strong purgation), *upanaha* (fomentation using pastes) and *ruksha-tikshna virechana* (dry-strong purgatives). *Seka* (irrigation) with *nimbadi yoga* is advised and *saindhava* (rock-salt) is used for *aschyotana* (eye drops). *Shigru patra* (drumstick leaves) is recommended for *pindika* (application of paste using a cloth on entire eye), while *rasanjanadi* preparations are suitable for *bidalaka* (application of paste using a cloth on entire eye leaving eye lashes). *Phaninjika* (Trichosanthes dioica) is used for *sweda* (fomentation).

In conditions of *netrabhishyanda* (conjunctivitis), *parijata valkala yoga*, *souviradi lepa* and *salvanadi yoga* are mentioned.

For ***raktaja abhishyanda*** (conjunctivitis caused by *rakta dosha*), *triphala seka* (irrigation of eyes using *triphala* decoction) is preferred, along with *stanya* (breastmilk) and *lodhradi aschyotana*. *Sriparni aschyotana* and *vasadi kwatha* are also described.

In the management of ***adhimantha*** (glaucoma), *siravyadha* (venesection) is performed at the *lalata* (forehead) region and *dahana* (cautery) is done above the eyebrows. The general line of treatment for all four types of *abhishyanda* (conjunctivitis) is outlined. Internally, *yashtyadi kwatha* is given, while *daruharidradi rasakriya* is used as *aschyotana* (eye drops). A combination of *guduchi* (Tinospora cordifolia), *triphala* (*haritaki-Indian walnut, vibhitaki-bellerica and amalaki-Indian gooseberry*) and *madhu* (honey) is considered beneficial for various eye disorders. For ***netra shula*** (ocular pain), *pundarikadi kwatha* is used for *seka* (irrigation), while *shweta lodhradi yoga* is preferred for the same purpose. *Yashtyadi lepa* is applicable in different ocular diseases and *saindhava-lodhra lepa* is recommended for *netra rogas* presenting with *netra shula* - painful presentations. *Nimbu rasa yoga* may also be used as *lepa* (application of paste) in multiple eye disorders. *Nimbadi pinda* is suitable for *vata*, *pitta* and *kapha* eye conditions.

In cases of *netra shotha* (eye swelling) and *paka* (suppuration), procedures such as *jalouka* (leech therapy), *virechana* (purgation), *siravyadha*

(venesection) and *netra shukra chikitsa* (treatment of corneal ulcer) are advised.

A decoction of *triphala* (*haritaki-Indian walnut, vibhitaki-bellerica and amalaki-Indian gooseberry*), *patola patra* (leaves of Trichosanthes dioica) and *vasa* (Adathoda vasica) in equal quantities is given internally along with *shuddha guggulu* helps in reducing *paka* (suppuration) and *shotha* (swelling).

For ***vata viparyaya*** (trigeminal nerve atrophy) and ***shushkakshi*** (dry eyes), the treatment of *vataja abhishyanda* (conjunctivitis caused by *vata dosha*) is followed. *Ghritapana* (intake of ghee) or *ksheerapaka* (a formulation prepared using milk) is administered first, followed by *seka* (irrigation) with *payasa* or *daru-ksheera* combinations. *Saindhava ghrita* is also indicated.

In ***amladyushita*** (macular disease) conditions, *tiktadravya-siddha ghrita* is prescribed internally, along with cooling applications like *sheetala lepa*. *Bilwaphala majja* (fruit kernel of Indian bael) processed with *triphala* (*haritaki-Indian walnut, vibhitaki-bellerica and amalaki-Indian gooseberry*) and *ghrita* (ghee) is given internally, and *siravyadha* (venesection) is performed when needed. *Pittaja abhishyanda* (conjunctivitis caused by *pitta dosha*), management can be included.

In ***sirotpata*** (conjunctival hyperaemia), ***siraharsha*** (scleritis and episcleritis) and other ***raktaja*** (blood) conditions, *ghritapana* (intake of ghee orally), followed by *siravyadha* (venesection) is helpful. *Anjana (collyrium)* may include *saindhava* (rock-salt) with *stanya* (breast milk) and *kasisa* (copper sulphate).

For ***siraharsha*** (scleritis and episcleritis), combinations like *phanita* (jaggery) with *madhu* (honey), *kasisa* (copper sulphate) with *tarkshya* (emerald) and *madhu* (honey), *stanya* (breast milk) with *amlavetasa* (Garcinia pedunculata) and *phanita* (jaggery) *with saindhava* (rock-salt) are recommended. The same general line of treatment is applicable to *pittaja abhishyanda* (conjunctivitis caused by *pitta dosha*).

In ***nayanabhighata*** (ocular injuries), symptoms include excessive tearing, red streaks, difficulty in *nimesha* (closing of eyes) and *unmesha* (opening of eyes) and a sensation of foreign body (*shalya*). Treatment focuses on *sheeta aschyotana* (eye drops having cooling property), *punarnava mula kalka pindi* and *kuchandana lepa*, along with *stanya* (breast milk). *Drushtiprasada anjana* using *snigdha* (unctuous), *hima* (cold) and *madhura* (sweet) substances is advised. The same therapeutic approach applies when *sweda* (fomentation), exposure to heat, fumes, fear, or grief aggravate the condition.

If there is a loss of vision due to exposure to sunlight or flashes of light, nourishing therapy with *santarpana* (nourishing), *snigdha* (unctuous) and *hima* (cold) measures is recommended. *Triphala* (*haritaki-Indian walnut, vibhitaki-bellerica* and *amalaki-Indian gooseberry*) is also given internally. *Nishaabdha akshipurana* and *shabara-madhuka yoga* are included in the regimen.

For ***atinidra*** (excessive sleep), *anjana* (collyrium) with *krishna maricha* (black pepper), *ashwa-lala* (horse's saliva) and *madhu* (honey) is used. For ***tandranasha*** (for drowsiness), *anjana* (collyrium) prepared from *jati* (jasmine), *pravala* (coral), *maricha* (pepper), *katuka* (Picrorhiza kurroa), *vacha* (Acorus calamus) and *saindhava* (rock-salt) mixed with *basta mutra* (goat's urine) is advised.

Bhimaseni karpura is also mentioned for eye disorders.

***Kriyakalpa* (ocular therapies)**

Seka (irrigation) is described with three types—*snigdha* (unctuous) for *vata*, *lekhana* (scrapping) for *kapha* and *ropana* (healing) or *prasadana* (clarifying) for healing—performed for 600, 300, and 400 *matra kala* respectively. Daytime administration is preferred, but emergencies allow nighttime use. In winter, *ushna seka* (warm irrigation) is used for *vata* disorders.

Aschyotana (eye drops) is not done at night and is applied from a height of two *angulas*. Ten *snigdha* (unctuous), eight *lekhana* (scrapping) and twelve *ropana* (healing) formulations are noted. *Vataja netra rogas* (diseases caused by *vata dosha*) benefit from *tikta* (bitter) and *snigdha* (unctuous) substances; *pittaja rogas* (diseases caused by *pitta dosha*) require *madhura* (sweet) and *sheetala* (cold) medicines; and *kaphaja rogas* (diseases caused by *kapha dosha*) require *tikta* (bitter), *ushna* (hot) and *ruksha* (dry) *dravyas* (drugs).

Pindi (application of paste using a cloth on entire eye) is used in *netrabhishyanda* (conjunctivitis) and *vrana* (wound), while ***bidalaka*** (application of paste using a cloth on entire eye except eye lashes) refers to external *lepa* and it is similar to *mukhalepa* (facial applications).

Tarpana (a type of *kriyakalpa*) is described with its indications, contraindications, procedure and duration, along with signs of proper, excessive and inadequate administration.

Dhavana yoga refers to head-bath procedures which includes:

For *Chakshushya* and *anilapaha* (for good eyesight and to decrease the aggravated *vata*), *krishna tila kalka* (black sesame paste) is applied.

In *pittaja vriddhi* and *pittaja timira* (in increased *pitta* and cataract caused by *pitta dosha*), a paste of *yashti* (Glycyrrhiza glabra) and *amla* (Indian gooseberry) is used and *kacha* (a stage of cataract) is managed with *jalouka* (leech therapy).

In *kapha vriddhi* and *kaphaja timira* (in increased *kapha* and cataract caused by *kapha dosha*), *vacha swarasa* or *vacha kalka* (liquid extract and paste from Acorus calamus) prescribed for head wash.

Aamalaka kalka (paste of Indian gooseberry) is applied to the scalp and then taking bath will improve the vision always.

Under *pathya aharas* and *viharas*, he explains *ashcyotana* (eye drops), *langhana* (fasting), *anjana* (collyrium), *sweda* (fomentation), *virechana* (purgation), *pratisarana* (rubbing the eyelid margin), *purana* (*tarpana* or *putapaka*), *nasya* (nasal medication), *raktamokshana* (blood-letting), *shastra karma* (surgical intervention), *lepana* (application of paste), *ajyapana* (intake of ghee), *seka* (eye irrigation), *manonivritti* (calmness of mind), *gurujana puja*(worshipping teachers or elders), *mudga* (green gram), *yava* (barley), *lohitashali* (red rice), *koumbha ghrita* (old ghee), *vana kulattha yusha* (soup made of horsegram), *peya* (thin gruel), *vilepi* (thick gruel), *surana* (elephant foot yam), *patola* (pointed gourd), *vartaka* (brinjal), *karkotaka* (Momordica dioica), *karavella* (bittergourd), *navina mocha* (unripe fruit or flower of banana), *nava mulaka* (young raddish), *punarnava* (Boerhavia diffusa), *markava* (Eclipta alba), *kakamachi* (Solanum nigrum), *pattura shaka* (Alternanthera sessilis), *kumari* (aloe vera), *draksha* (grapes), *kustumburu* (coriander), *lodhra* (Symplocos racemosa), *triphala* (*haritaki-Indian walnut*, *vibhitaki-bellerica* and *amalaki-Indian gooseberry*), *kshoudram* (honey), *upanaha* (hot poultice), *naripaya* (breast milk), *chandana* (Santalum album), *karpura* (camphor), *sarva tikta* and *laghu pathya* (all bitter and light food articles). A *vaidya* should advise the above *pathyas* based on the *doshas*.

Special *apathyas* in any diseases specifically *netra rogas* includes *krodha* (anger), *shoka* (grief), *maithuna* (sexual intercourse), *ashru-vayu-vin-mutra-nidra-vami vega dharana* (suppression of tears-flatus-stools-micturition-sleep-emesis), *sukshmekshana* (excessive near work), *danta vigharshana* (tooth brushing), *snana* (bathing), *nisha bhojana* (having food at night), *atapa* (exposure to sunlight), *prajalpana* (excessive talking), *chardana* (emesis), *ambupana* (excessive water intake), *madhuka pushpa* (Madhuca longifolia), *dadhi* (curd), *patra shaka* (leafy vegetables), *kalinga* (*kalamegha*), *pinyaka* (*tilakalka*/ residual pulp left after oil extracting), *virudhaka* (sprouts), *matsya* (fish), *sura* (alcohol), apart from *jangala mamsa* (meat from other than dry land), *tambula* (betel leaf), *amla-lavana-vidahi-tikshna-katu-ushna-guru annapana* (sour-salt-spicy-strong-pungent-hot-heavy food articles).

Special reference regarding *shaka panchakas* states *"sarva shakam achakshushyam, chakshushyam shaka panchakam"* all leafy vegetables are considered to be *achakshushyam* expect these five leafy vegetables *viz.*, *jivanti* (Leptadenia reticulata), *vastuka* (Chenopodium album), *matsyakshi* (Alternanthera sessilis), *meghanada* (Amarathus spinosus), *punarnava* (Boerhavia diffusa) which emphasis on the concept of specific *patra shaka varga* for *netra.*

Regarding *pathya* (wholesome) during *netra rogas*, *shali* (rice), *tandula* (uncooked rice), *godhuma* (wheat), *mudga* (green gram), *saindhava* (rock-salt), *goghrita* (cow's ghee), *gopaya* (cow's milk), *sita* (sugar candy) and *kshoudra* (honey) are considered as wholesome for maintaining ocular health. *Apatya* (unwholesome) includes *masha* (blackgram), *kanji* (fermented gruel), *sarshapa taila* (mustard oil), *jala-avagaha* (water immersion), Solanum virginianum, Hygrophilia auriculata, *sura* (alcohol), *nishijagara* (night vigil), *patrashaka* (leafy vegetables), *amla dravyas* (sour food), *matsya* (fish), *dadhi* (curd), *phanita* (jaggery), *veshavara* (a meat preparation) and *suryavilokana* (exposure to direct sunlight), as these contribute to deterioration of vision (*chakshurendriya shakti kshaya*).[1]

DISCUSSION

- The present compilation highlights that the classical text *Yogaratnakara* adopts a distinctly clinically oriented approach to *netra chikitsa*, wherein ocular assessment is repeatedly emphasised as a diagnostic, prognostic and therapeutic tool across a wide spectrum of diseases.
- The inclusion of *drik pariksha* under *Ashtasthana pariksha* reinforces the concept that the eye functions as a sensitive reflector of systemic *doshic* imbalance, anticipating modern clinical reliance on different *netra lakshanas* in systemic illness.
- The detailed categorisation of *vata*, *pitta*, *kapha*, *dvandvaja* and *tridoshaja netra lakshanas* explains a uniformed method of correlating *netra rachana* (morphological) and *kriya* (physiology) with internal pathology, indicating an early framework of functional attribute.
- The detailed explanation of fatal signs (*arishta lakshanas*) involving the *netra lakshanas* enlightens the *sadhya-asadhyata* w.r.to different *netra lakshanas*, indicating that sudden anatomical and functional changes were considered as the indicators of approaching the systemic failure.
- Different *pathyas* in the text reveals a strong emphasis on preventive ophthalmology, where different *pathyas* are classified as *chakshushya* (good for eyes) or *chakshughna* (which affects eye), thereby integrating nutrition directly to maintain *netra swastya*.
- The concept of *dinacharya* and *ratricharya* reflects an understanding of lifestyle-induced *netra rogas*, with contraindications such as *vega dharana*, *ratrijagarana* and excessive sun exposure paralleling modern risk factors for different *netra rogas*.
- *Nidravegadharana* causes *indriya gourava* and we can understand that sleep deprivation can lead to dry eyes, itchy eyes, blurry vision, eyelid twitches and

lower tear production in the short term and can be a precipitating factor for myopia, glaucoma, ischemic optic neuropathy and diabetic retinopathy in the long term.[2]

- The extensive correlation between *netra lakshanas* and different systemic disorders such as *jvara*, *pandu*, *kamala*, *prameha*, *apasmara*, *shwasa* and *rajayakshma* supports the Ayurvedic view that various *netra lakshanas* often precede or accompany systemic pathology.
- The repeated mentioning of *ghrita*, *ksheera*, *triphala* and other *chakshushya* dravyas suggests a sustained focus on *rasayana* principles for preserving vision, which aligns with contemporary concepts of antioxidant and neuroprotective support.
- *Acharya Charaka* has explained that *nasa* is the portal for *shiras* and *Acharya Chakrapani* has metaphorically emphasised that the *dravyas* used for *nasya* will remove the morbid *doshas* by entering the head and he exemplified this by quoting that just as *ishika* is derived by taking out of adhered fibrous *munja* coating.[3] So, *nasya* is said to detoxify the *urdhwajatru* by doing *sthanika dosha shodhana*.
- *Padabhyanga* has been described to possess the benefit of *Drushtiprasadakrit.* To justify this *Acharya Vagbhata* has emphasised the presence of 2 *nadis* that go from the *padamadhya* to *netra*.[4] *Ayurveda* explains that the development of organs that is both *pada* and *netra* have their origin from *vaikarika* and *rajasika ahankara* and both develop in the same month of intrauterine life. Thus, by therapy on *pada*, we can have its effects on *netra* because of their similar origin. In pedal inunction, the absorbed *taila* through the *rasa* in the skin and blood in the *siras* gives noursihment to the eyes. According to physiology, Since both eyes and feet are having same somatic sensory location (area – 2 of the cortex), *padabhyanga* helps in their stimulation.[5]
- *Vamana* contraindicated in *timira*: The inspiratory thoracic muscles and abdominal wall muscles contract leading to raise in the intra thoracic and intra-abdominal pressures during the process of *vamana*. This leads to diminished venous return to the heart and decreased stroke volume subsequently increasing the venous system pressure due to increasing intra thoracic pressure against a closed glottis. There might be a risk of spontaneous rupture of the retinal capillaries due to sudden raise in IOP.[6]
- *Virechana* is indicated in *netra rogas*: At the molecular level, *virechana* can modulate the physiological, biochemical and immunological activities. It can also correct the vascular pathology by enabling the absorption of subretinal fluid. Anti-haemorrhagic physiological mechanisms can also be enhanced by *virechana* that causes *koshtha shodhana*. *Drishti* is one of the *pitta sthanas* and *virechana* helps in the mitigation of *pitta*. *Virechana* also helps in preventing photoreceptor degeneration by its *vyavayi*, *vikasi*, *sukshma*, *ushna* and *teekshna guna*.[7]
- The *Netrarogadhikara* of *Yogaratnakara* closely follows the foundational framework of Acharya *Sushruta*, yet expands therapeutic details, indicating a shift from purely surgical emphasis towards integrated different *aushadha kalpas* and *kriyakalpas*.
- The explanation of *patala* involvement in *drishtimandala rogas* provides a layered understanding of disease progression, comparable to modern stratification of anterior and posterior segment disorders.
- The detailed explanation regarding the *sama* and *nirama avastha* in various *netra rogas* emphasises the importance of phased intervention and alert against early administration of strong therapies like *anjana*, *tarpana*, *putapaka*.
- The systematic documentation of seven *kriyakalpas* such as *seka*, *aschyotana*, *pindi*, *bidalaka*, *tarpana*, *putapaka* and *Anjana* indicates a rational, *doshic*-specific and *roga*-specific therapeutic strategy.
- The repeated explanation of use of *shodhana* procedures such as *siravyadha*, *virechana* and *jalaukavacarana* in *pitta* or *raktaja netra rogas* specifically inflammatory and severe eye disorders indicates recognition of *sarvadaihika shodhana* in preventing disease progression and recurrence.
- The management of different *netra rogas* like *abhishyanda*, *adhimantha*, *timira* and *savrana shukra* indicates an integrated approach by combining various *abhyantara chikitsa* and different external ocular therapies – *kriyakalpas* in a specific phased manner.
- Overall, the text reflects a comprehensive ophthalmic model, integrating *swasta upayas*, *nidana panchakas*, *sadhya-asadhya lakshanas* and *chikitsa* thereby maintaining significant relevance of *netra rogas* and its *chikitsa* w.r.to contemporary Ayurvedic ophthalmology.

CONCLUSION

The descriptions compiled from the classical text-"*Yogaratnakara"* highlight a remarkably comprehensive approach to Ocular diseases, with detailed guidance ranging from *swastha raksha upayas* to *chikitsa* of specific *netra roga*. The different *yogas*, *kriyakalpas* and *pathya-apathyas* explained in the text emphasises a deep understanding of *netra roga samprapti* and demonstrate how closely *netra rogas* were observed and managed. The emphasis on *doshic chikitsa*, precisely *kriyakalpas* and supportive *abhyantara chikitsa* reflects a holistic and practical clinical orientation in different *netra vikaras*. Many of these principles retain clinical relevance even today, offering valuable therapeutic insights for contemporary ophthalmic practice in *Ayurveda*.

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