

VARIOUS THERAPEUTIC PROCEDURES AND DRUGS USED IN *NETRA ROGAS*: AN
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ABSTRACT

Shalakyatantra is branch of ancient Ayurveda which deals with diseases situated above clavicle region. This stream of Ayurveda mainly offers therapeutic management of diseases related to eye, ear and nose, etc. This branch deals with sense organs therefore require expertise and considered one of the important branch of Ayurveda. Eye (*Netra*) is important sense organ of body and Ayurveda described many diseases related to *Netra* along with their therapeutic management. Routes of drug administration, onset of drug action, penetration of drugs through ocular tissue and duration of action of therapy, etc. are important factors while selecting therapies for *Netra Rogas*. Medical science emphasizes systemic as well as local treatment for the management of *Netra Rogas* and *Kriyakalpa* is one such treatment. *Netra Kriyakalpa* are treatment procedures used for the management of eye diseases, these includes *Putapaka*, *Seka*, *Aschotana*, *Anjana*, *Pindi* and *Bidalaka*, etc. These Ayurveda therapies offers pivotal role in the treatment of *Netra Rogas*.

KEYWORDS: Ayurveda, Netra, Rogas, Kriyakalpa.**INTRODUCTION**

Ayurveda is oldest scientific systems of health restoration; this system of disease management not only works around treatment of disease but also helps to maintain social, psychological, physical and spiritual health. In this regards Ayurveda explores various branches which deals in particular area, Ayurveda branch works around sense organs referred as *Shalakyata tantra* which deals with diseases of eye, ear and nose, etc. The disease of eyes, ear, nose & throat comes under heading of *Urdhwajatrugata vyadhis*. Therefore Ayurveda *Shalakyata tantra* focuses on these diseases and provides several therapeutic measures to cure diseases of eye, ear, nose and throat, etc.^[1-5]

Eyes is considered most precious sense organs, it is important organ of *Urdhwajatrugata sthana*. Ayurveda philosopher mentioned several diseases related to eye and their management under the heading of *Shalakyata tantra*. The signs of common *Netra Rogas* are *Udirna vedana*, *Raga*, *Shoatha*, *Garsha*, *Nisthoda*, *Shoola* and *Ashru yuktham*, etc.^[3-6]

Symptoms of eye disorders as per modern science

- Blurred vision
- Loss of vision

- Photophobia
- Difficulty seeing at nighttime
- Burning sensation and dryness, etc.

Ayurveda advocated many approaches for reliving symptoms of eye disorders and *Kriyakalpa* is one of the important approach which helps to cure diseases of eye and also maintain the vision. *Kriyakalpa* encompasses two words as depicted in **Figure 1** which means uses of drugs or materials for specific procedure to relives diseases of eye.

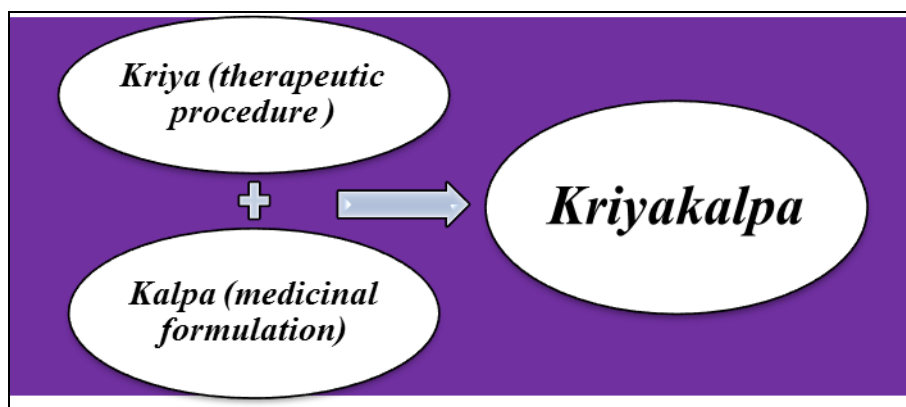


Figure 1: Literary meaning of word *Kriyakalpa*.

Sushruta mentioned five types of *Kriyakalpa* including *Tarpana*, *Putapaka*, *Ashchyotana*, *Parisheka* and *Anjana*, while *Sharangadhara* described seven types of *Kalpa* i.e. *Tarpana*, *Putapaka*, *Ashchyotana*, *Parisheka*, *Anjana*, *Pindi* and *Bidalaka*.

Role of therapeutic procedures (*Kriyakalpa*) in *Netra Rogas*

Kriyakalpa acts locally, helps to reduce level of aggravated *Doshas*, improves health of eyes, and imparts soothing and calming effects. *Ayurveda* described several types of procedures under the heading of *Kriyakalpas* in *Netra Vigyan* including *Putapaka*, *Seka*, *Aschotana*, *Anjana*, *Pindi* and *Bidalaka*, etc.

Tarpana

Medicated *ghrita* hold over the eyeball with blinking action of eyes for particular period of time depending upon involvement of *Dosha*. This procedure nourishes eyes, helps to treat *Vata* and *Pittaja netra rogas*. This procedure can offer health benefits in progressive refractive errors, tired eyes and diseases of retina, etc. The advantage of this therapy is that particles of *Ghee* not leave eye before time and remain in contact with affected area thus drugs are absorbed effectively and cross corneal epithelium barrier.

Putpaka

This is similar to *Tarpana*, here juice of medicinal substance extracted with *Putpaka vidhi* used instead of *Ghrta*. This procedure indicated for rejuvenation of eyes. The advantage of this procedure is that it offers greater absorption than *Tarpana* due to its lipophilic and hydrophilic property.

Ashchyotana

Instillation of drops of medicated *Kwath*, *Ksheera* and *Sneha*, etc. on the open eye. It is used for infection and allergic condition of eye. The contact time is very less thus get diluted with tears.

Seka

Medicine poured on the closed eye in the form of *Dhara* from the height of four *Angula*. This procedure is indicated for acute inflammatory conditions of eye. This

procedure facilitates absorption of medicine through skin of lids.

Anjana

Paste or powdered medicines applied over the inner margin of lower lid using delicate applicator or finger tip. It is used for localized *Doshas* aggravation. The bioavailability of drug increases due to the more tissue contact time of drug.

Pindi

It is medicinal bandage, in this procedure paste of medicine tied by a cloth and bandaged over the eye. This therapy is considered good for *Abhisyanda* and *Adhimanta*. Medicine is absorbed *via* skin of lid and heat of poultice causes local vasodilatation.

Bidalaka

This procedure involves application of medicated paste to the eye lids. This therapy indicated in chalazion and inflammatory condition of eyelid. Medicine is absorbed through skin and vasodilatation improves reaches of medicaments.^[5-8]

Mechanism of *Kriyakalpa* procedures in *Netra Rogas*

The *Virya*, *Karma* and *Prabhava* of drugs impart their actions when drugs come in contact with the *Netra vartma* and *Netra Siras*. *Veerya* of drugs improves drugs penetration and these procedures ease absorption of medicines into the ocular tissue. The higher penetration of drug, good contact time with ocular tissue and fast onset improves bioavailability of medicaments used in *Kriyakalpa* procedures.

The procedure like *Seka* involves pouring of medicines to closed eye this procedure avoids direct contact thus prevent chances of irritation to the ocular tissues. *Ayurveda* mentioned that *Drava sweda (Seka)* is best for relieving *Pitta samsrusta vyadhi*.

When drugs administered topically in the eye through *Aschyotana* procedure then drug penetrate through cornea and conjunctiva. Corneal epithelium allows passage of water repellent substances by diffusion; water soluble contents traverse the cornea by paracellular

pathway while lipid soluble contents traverse the corneal epithelium.

Pindi facilitate drug absorption through transdermal therapeutic system, this procedure improves bioavailability of drug, and moreover vasodilation caused by the heat of packing facilitates transcutaneous absorption.^[7-10]

Natural drugs/Herbs for Eye

- **Eyebright** helps in itchy eyes and conjunctivitis.
- **Ginkgo Biloba** can reduce risks of glaucoma.
- **Fennel** is helpful for watery and inflamed eyes.
- **Saffron** used to treat cataracts, can also delay degeneration of eyesight.
- **Bilberries** helped in night vision.
- **Turmeric** helps to reduce oxidation of the eye lens.
- **Grapeseed** is good for the eyes, improves overall health of eye.
- **Goldenseal** used as an eyewash, cure mild irritation and reduces allergic problems.

CONCLUSION

Shalakyā tantra is important modality of Ayurveda, which deals with *Urdhwajatrugata vyadhis*. This branch described several diseases related to eye and their Ayurveda management. *Ayurvedic samhitas* offers local treatment for *Netraroga* in the form of *Kriyakalpa*. These are therapeutic procedures used for curing diseases of eye and maintain normal vision. Selection of drugs, preparation of specific formulation and mode of administration of medicines, etc. are important factors play vital role in the therapeutic procedures of *Netraroga*. *Netra Kriyakalpa* involves various procedures like *Putapaka*, *Seka*, *Aschotana*, *Anjana*, *Pindi* and *Bidalaka*, etc. These therapeutic procedures help in eye diseases and relives various symptoms of *Netra Rogas* including *Udirna vedana*, *Garsha*, *Raga*, *Shotha*, *Nisthoda*, *Ashru yuktham* and *Shoola*, etc.

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