



## NETRAKRIYAKALPA - LOCAL OCULAR THERAPEUTICS

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Received: 05/02/2019

Edited: 13/02/2019

Accepted: 21/02/2019

**Abstract:** *In Ayurveda the local treatment procedures of Netra or eye are explained as Netra kriyakalpa. These procedures help to alleviate the diseases and to strengthen the proper functioning of eye. Mode of application of medicine is very specific in case of eye diseases. Based upon the seven kriyakalpas has been explained by ancient acharyas.*

**Keywords:** *Kriyakalpa, Netraroga Ocular therapeutics.*

### Introduction

The word *kriyakalpa* built from two words: *kriya* and *kalpa*. The word *Kriya* means therapeutic action and *kalpa* means specific formulations<sup>1</sup>. *Kriyakalpas* are local treatment procedure of *netra*.

*Kriyakalpa* is the basis of the ophthalmic disorders, as Panchakarma is the basis of *Kayachikitsa*. When we refer to our classics for the therapeutic measures adopted in the management of

eye diseases, we find that the management includes many of the topical treatments along with systemic ones. No specific definition of *Kriyakalpa* has been given by the ancient scholars except the commentator Dalhana. 'Kriya' means the therapeutic procedures and 'Kalpa' means the specific formulations adopted for the topical ophthalmic formulations frequently employed in *Tarpana*, *Putapaka*, *Seka*, *Ashchyotana* and *Anjana* therapies

have been mentioned by Acharya Sushruta and the measures are called KRIYAKALPA.

*Kriyakalpa* are *bahiparimarjanchikitsa* and has several advantages over oral administration of drugs as mentioned below :

1. The drug given orally will undergo digestion under the influence of *pachakapitta*. The drugs administered through *kriyakalpa* are not digested by it and properly rectify accumulated *doshas*.
2. The oral drugs find it difficult to cross blood aqueous, blood vitreous and blood retinal barrier to reach the target tissues of the eye. The topical drugs can reach there and achieve higher bioavailability.
3. The tissues contact time of the drugs can be controlled in *kriyakalpas* and they are selected depending upon the stage and severity of the diseases.
4. The medication can be judiciously selected i.e. to increase *ushna* or *sheeta*, *snigdha* or *rookshaguna* in the local area. Thus high concentration of drug can be achieved by applying the medicines to the eye.

### Types of *Netrakriyakalpas*

According to *charaka*: - 3 types- *Aschyotana*, *Anjana*, *Vidalaka*<sup>2</sup>.

According to *acharyaSushruta*: - 5 types- *Tarpana*, *Putpaka*, *Aschyotana*, *Pariseka*, *Anjana*<sup>3</sup>.

According to *acharyavagbhata*: - 6 types- *Pariseka*, *Tarpana*, *Aschyotana*, *Vidalaka*, *Anjana*, *Putapaka*.

According to *acharyaSharangadhar*: - 7 types- *Pariseka*, *Tarpana*, *Putpaka*, *Aschyotana*, *Anjana*, *Pindi*, *Vidalaka*<sup>4</sup>.

### Procedures and Indications of *Netrakriyakalpas*

**Tarpana**: - It gives nourishment to the eyes and cures the *vata-pitta vikara*. It is indicated mainly in visual disturbances, dry eye conditions, Allergic conditions, diseases of eyelids and structural deformities of eye<sup>5</sup>.

**Putapaka**: - Its procedure similar to *tarpana*, but the ingredients, preparation of medicine and durations are different. *Putapaka* can be done after *tarpana* or independently. Indications and contra-indications of *tarpana* are also applicable to *putapaka*<sup>6</sup>.

**Pariseka**: - It is the procedure of pouring the liquid medicines very slowly to open eye from a height of four angula<sup>7</sup>. It is indicated in *pothaki*<sup>8</sup>, *utsangini*, *anjana namika*<sup>9</sup>, *paksmaparodha*<sup>10</sup> and *sannipataja timira*<sup>11</sup>.

**Aschyotana**: - Instillation of few drops of medicines to the open eye from a height of two *angula*<sup>12</sup>. It is the first line of treatment in eye diseases. It is indicated when *doshas* are not *severly* vitiated and the disease is in the early stage<sup>13</sup>.

**Anjana**: - It is a procedure of applying medicinal pastes or powders to the inner side of lower lid, either by fingertip or with an *anjana shalaka*. It is indicated when *doshas* are fully manifested and are localized in the eye<sup>14</sup>.

**Vidalaka**: - It is the application of medicated paste to the outer surface of the eyelids<sup>15</sup>.

**Pindi**: - It is the modification of *vidalaka*. Instead of directly applying the pastes to eye lid, they are packed in thick cotton cloth and are kept tightly over the eye lids. *Pindi* is useful in the early stages of all the eye diseases in general and *Abhisbyanda* in particular<sup>16</sup>.

### Discussion:

When we refer our classics for therapeutic measures adopted for the treatment of eye diseases. Many of the topical treatment along with systemic ones are observable. The reason might be failure of systemic drugs to cross blood-aqueous, blood-vitreous and blood- retinal barriers. The problem can be solved by using the medicines topically.

Actually Eye diseases are very common today due to modern lifestyle, insufficient sleep and other causes. In today's modern and fast life style everyone wants fast relief from all kinds of trouble. Modern treatment give symptomatic relief in eye disorders but not complete cure and some peoples are also sensitive to these treatments. To avoid all such problems and for getting effective relief from eye diseases, *netrakriyakalpas* are the important source of eye treatment. Various drugs can be selected and can be used in various ways. *NetraKriyakalpas* empowers the eyes and helps to improve the vision as in various eye disorders. It improves the strength of eyes. It

helps to cure the diseases and also prevent complications.

After administration of drug in to the eyes in different procedures, firstly it absorbs through various layers of the eye. Then it spreads in to the deeper tissues through Rupavaha Sira. It activates both type of Alochak Pitta and achieves overall improvement in sign and symptoms of disease as well as visual status.

**Conclusions:** *Netrarogas* are best treated with *kriyakalpas*. To achieve high concentration at the site

of lesion topical or local application is the main route of administration of drug in eye diseases. *Kriyakalpa* therapy is effective through its *doshghna* and *chakshushya* properties. It seems to be cost effective. It will be proved to be beneficial for wide use of *kriyakalpas* to prevent and cure eye disorders. Features of these therapies properly done are sleeping and awakening, becoming comfortable, cleanliness, clarity of vision, relief in diseases and lightness of movements.

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