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A REVIEW STUDY OF *BIDALAKA* AND ITS IMPORTANCE IN EYE DISEASES

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ABSTRACT

Shalakyatantra is a branch of Ayurveda which deals with diseases and treatment of organs situated above clavicle. As it deals with sense organs it is highly specialised and important. Eye is unarguably most important of the five sense organs. One should make all sincere efforts to protect eyes and treat eye diseases. Sushruta has mentioned 76 eye diseases out of which treatable diseases are treated with systemic as well as local treatment. Kriyakalpa is one of the local treatments. Acharyas have explained various therapeutic procedures which are formulated with different drugs and different routes of drug administration according to disease. Being local therapeutic procedure, fast action and penetration of drugs through ocular tissue raises importance of Kriyakalpa in ocular diseases. Bidalaka is one of the important Kriyakalpa explained in ayurvedic texts, which is having a vivid utility in many Netra Rogas. Bidalaka therapy gives tremendous results in acute stage of diseases. According to Charaka, Bidalaka gives great results in acute eye disease. According to

KEYWORDS: Kriyakalpa, Bidalaka, Lepa, eye diseases, Ayurvedic treatment.

INTRODUCTION

Ayurveda is a science of human well being in physical, social as well as mental aspect. The treatment mentioned for every disease is not only to cure the disease but also to enhance the health and quality of life. Taking into consideration this *sutra* of Ayurveda, *Kriyakalpa* has gained tremendous importance to cure the disease as well as maintain the vision. As far as sense organs are concerned Eye stays at the top due to its irreplaceable function. Hence to treat eye disease and preserve the vision, one should always work on priority.

Kriyakalpa is a combined word of two distinct concepts which are Kriya which means therapeutic procedure and Kalpa which means medicinal formulation. The action of Kriyakalpa can be correlated with Panchkarma. Panchkarma is used for sharir parimarjan that is detoxification of body and settle tridosha. Kriyakalpa acts similarly locally. It settles the raised level of doshas and improves health of eyes. Before kriyakalpa whole body shodhana with the help of Panchkarma is important, that enhances the action and absorption of the Drug. [2]

There are 7 numbers of *Kriyakalpas* in *Netra Vigyan* explained by different *acharyas*. *Sushruta* mentioned 5 types of *kriyakalpa*. [3] *Sharangdhara* added two *kriyakalpa* into it named *Bidalaka* and *Pindi*. [4]
Types of *kriyakalpa* mentioned by different *acharyas*

- *Tarpana* the word means feeling of satisfaction. In this procedure medicated *ghrita* is hold over eyeball with continuous blinking action of eyes for a stipulated time according to intensity and nature of aggravated *dosha*. [5]
- *Putpaka* this procedure is similar to that of *tarpana vidhi*, except the drug used for this procedure is medicinal juice extracted with *Putpaka vidhi* instead of *ghrita*. ^[6]
- *Ashchyotana* it is instillation of drops on an open eye from 2 *angula* height. The drops used may be in the form of *kwath*, *ksheera*, *sneha* or any *dravadravya*. [7]
- *Sekal Parisheka* with eye closed, medicine is poured on eye in the form of *dhara* from the height of 4 *angula*. [8]
- Anjana- in this procedure paste or powder of medicines is used and applied over inner margin of lower lid with the help of applicator or finger tip. [9]
- *Pindi/ Kavalika* this is nothing but a medicinal bandage. Paste of medicine is tied by a cloth and this pack is bandaged over the eye. [10]

Bidalaka

Paribhasha^[11]

Bidalako bahirlepo netre pakshmavivarjite

Bidal means cat's eye. In this kriyakalpa paste of medicine is applied over eyelids and periorbital area

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except eyelashes. Eye looks like cat's eye hence called 'Bidalaka'.

Matra^[12]

Tasya matra paridnyeya mukhlepavidhanvat Matra of Bidalaka is same as mukhlepa (face pack) as-Kanishtha matra- ½ angula Madhyam matra- ½ angula Uttam matra- ½ angula

Dharan kala

It should be removed before it gets dried. If dried, it loses its property and spoils skin. [13]

Indications^[2]

Utpannamatre tarune netraroge Bidalaka | Karyo dahopdehashrushofragnivaran ||

- Acute stage of eye diseases
- Burning
- Discharge
- Watering
- Swelling
- Redness

Purvakarma^[14]

Before all the *Kriyakalpas*, whole body shodhana should be done.

The medicine paste should neither be thick nor very thin. It should be semisolid paste.

Before applying *Bidalaka*, patient should be comfortably lying down in supine position.

Mrudu snehana and *swedana* is done on face and lids to relax the patient and increase local vasodilatation for better absorption of drugs.

Pradhan karma

It is better to use lukewarm paste for Bidalaka.

Patient is asked to close the eyes and paste of medicine is applied over closed eyes in circle except on lid margin and eyelashes.^[11]

Patient is asked to keep his eyes closed.

The thickness of *lepa* should be considered according to severity of disease and aggravation of doshas.

Pashchat karma

After *Bidalaka vidhi*, skin is wiped out with cotton swab and lukewarm water.

Wiping should be done before *lepa* gets dried.

DISCUSSION AND RESULTS

Local therapeutics act faster and are more effective than systemic medicines. *Bidalaka* mainly acts in active stage of disease. As *Bidalaka* is applied in the form of paste over skin of periorbital area, skin permeability of drug should be taken into mind.

Temperature and permeability^[15]

The skin permeability can be changed by changing temperature. With increase in temperature and vascularity, absorption of drug increases. In *Bidalaka*, prior massage and *mrudu swedana* increases temperature and vascularisation of the skin area. Medicinal paste for *Bidalaka* should be *sukhoshna* i.e. warm which gives soothing effect and enhances drug permeability.

Skin thickness and permeability $^{[16]}$

Absorption of drug has regional variation at different body sites. Skin thickness takes a large part in skin permeability. Periorbital skin and skin over lids is thinnest of all over body. Hence paste applied over this skin gets absorbed more rapidly than any other part of body.

Water and lipid permeability^[17]

Paste for the procedure is made either water or *ghrita* according to *dravya* solubility. Water and lipid permeability of skin enhances the drug permeability more. The epidermis layer of skin is selectively permeable for lipid and water content. Water soluble contents are absorbed through skin by a passive diffusion process. Drugs absorbed through physiological membranes finally enter the capillaries and blood stream and acts on target tissue.

Tissue contact time

The *Bidalaka* is kept on skin for about 15-20 minutes depending on weather. It is wiped out before it gets dried. While in *Ashchyotana*, *seka* or other drop formulation drug tissue contact time is comparatively less. This explains the use of *Bidalaka* in acute stage of disease to lower symptoms like burning, swelling, redness.

The drug mixed in *Bidalaka* posses their property and acts with their fundamentals for e.g. *yashtyadi lepa Bidalaka* predominantly acts on *rakta* and *pitta* its action is *pitta* and *daha shamaka*.

CONCLUSION

Drugs taken systemically goes under digestion while drugs applied locally directly gets absorbed through blood stream and acts on target tissue. This makes kriyakalpa selective line of treatment over systemic one. Oral drugs need to face various barriers like bloodaqueous barrier, blood-vitreous barrier, blood-retinal barrier etc while local therapy provides higher concentration in less time. In kriyakalpa, potency of drugs can be increased by altering temperature, concentration, tissue contact time and way of application while in systemic drug delivery one should treat according to *Pachaka pitta* and *jatharagni*.

Bidalaka is useful to control acute symptoms and instant relief. It is user friendly and economic. Patient can carry on the treatment at home if once demonstrated. The side effects are comparatively less or negligible as there is no

actual contact with ocular structures like conjunctiva or cornea. Thus *Bidalaka* treatment can be used widely in various eye diseases. It gives excellent result in acute symptoms seen in *Abhishyanda vyadhi*.

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