



RELEVANCE AND SIGNIFICANCE OF VASTHI IN THE MANAGEMENT OF COMMON RETINAL PATHOLOGIES – A CONCEPTUAL REVIEW

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ABSTRACT

The concept of *Panchamahabhoota* and *Thridosa* forms basics of *Netraroga samprapthi* and *chikitsa*, apart from *Kriyakalpas*, *Panchakarmas* are another category of procedures which are widely used in *Netra rogas*. Although one among the *Panchakarma*, *vasti* is found to be least explored in *Netra roga chikitsa*. *Vasti karma* is considered as the most important procedure in fivefold *Panchakarma* therapy. It is capable of producing wide range of effects in various systemic diseases including neurological diseases. Being the specific treatment for vitiations of *vata dosa*, *Vasti* is said to be half of the whole treatment and sometimes complete treatment. There are some *Vastis* which are well known to perform *Chakshushya* and *Rasayanaika gunas*. These *Vastis* can also make use in pathological conditions of *Netra* by giving considerations to involved *Dosas* and *Dushyas*. Some common pathological conditions of eye including Retinal vascular diseases, Degenerative condition and also in prevention of recurrence of certain *Netra rogas*, *Vasti* can be employed. Retina is *Asthiyasrita patala* and thus *Vata* is the *Asraya dosa*, thus *vasthi* plays a crucial role in the management of pathological conditions. *Vasti yogas* processed with *Pitha samana* drugs like *Panchatiktaka ksheera vasti* has Sudden action in acute hemorrhages. *Choorna* forms of *vasthi* is *rooksha* in nature and is best to relieve retinal oedema, even if *Agni* is *manda* which is found effective in central serous chorioretinopathy. Many *Vasthiyogas* are neuro protective in action and also used in clinical conditions like glaucoma, optic atrophy etc. In this article an attempt has been made to explore the various *Vasthi yogas* which can be used in retinal pathologies.

Key words: *Vasthi*, Retinal diseases, *Panchakarma*.

NPDR – Non proliferative Diabetic retinopathy, PDR - proliferative Diabetic retinopathy, CRVO – Central retinal vein occlusion, ARMD –Age related macular degeneration, CSR – Central serous retinopathy, CME – Cystoid macular oedema

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INTRODUCTION

Netra is one among the *Pratyangas*(sub-structures) of head. Evolution and development of eye is dependent upon the action of five cosmic elements called as *Panchamahabhootas*[1]. Different combination of *Panchabhoota* forms *Thridosa* and distributed in various structures of eye. Thus the concept of *Panchamahabhoota* and *Thridosa* forms basics of *Netraroga samprapthi* and *Chikitsa*. *Netra chikitsa* possess an exclusive category called *Netrakriyakalpas*, includes many local therapeutics used in different conditions of eyes. These forms of topically applied medicines found less accessibility to posterior parts of eye. The diseases associated with the posterior segment of eyeball are mostly vascular and degenerative disorders of retina and lens like diabetic retinopathy, central retinal vascular occlusion (CRVO), central retinal artery occlusion (CRAO), retinitis pigmentosa, ARMD, optic atrophy and cataracts. the two major blinding diseases in the United States are diabetic retinopathy (DR) and age-related macular degeneration (AMD). DR is the main cause of irreversible blindness in adults aged 20 to 65 years and AMD is the main cause of irreversible blindness in adults older than 65 years [2]. Cataract is the leading cause of blindness in India while refractive

errors and Glaucoma are the second and third leading causes of blindness respectively [3]. All these exigere an alternate route of drug administration to effectively treat the above said conditions.

Along with *Kriyakalpas Panchakarmas* are another category of procedures which are widely used in *Netrarogas*. *Virechana*, *Nasya* and *Raktamoskha* are extensively used in various *Netra rogas*. Local therapeutics are usually adopted after proper *aabhyantara sudhi* (internal purification) which can be attained through *Sodhana* (Purification) procedures like *Vamana*, *Virechana*. Unlike *Vamana*, *Virechana*, *Nasya* and *Raktamoksha*, *Vasthi* is found to be least explored *Panchakarma* in *Netraroga chikitsa*.

Vasthi Karma is a unique and broad spectrum therapeutic and thus can be considered in curative as well as preventive aspects. There are various types of *Vasthis*, described in Ayurvedic classics. These are based on anatomical, pharmacological and physiological points of consideration. Most commonly used classification is *Anuvasana*, *Nirooha* and *Uttaravasti* [4]. *Vasthi* is considered as the specific treatment for *Vata dosha* and it particularly acts on *pakwasaya*(intestine), which is the specific site for *Vata*[5]. Apart from *Vata dosha* with various combinations of medicines it can be

used to treat Pitta, Kapha, samsarga, sannipatha conditions of *Doshas* [6]. While considering *Vasthi* in eye diseases there are some direct references in classics for *Chakshushya vasti* such as *Bala padooladi vasthi*, *Yashti yukta madhu tailika vasthi*, *Musta padaadi raja yaapana vasthi*[7]. Besides from these *Vasthi* can also be used in some common pathological conditions of eye including Retinal vascular diseases, Degenerative condition and also in prevention of recurrence of certain *Netrarogas*. An attempt has been made to explore such uncommon indications of *Vasthi* in *Netrarogas*. *Vata dosha* is important as Sarvendiyanaam udyojaka (Coordinate the functions of sense organs) Sarvendriyarthaanambhivoda (carrier of objects of indriyas) and *Sarva sareera dhatu vyuhakara* (keeps all the tissues of body together) which means regulate the functions of sense organs and helps in structural formation of *dhatu*s[8]. For this reason, conditions causing structural instability and defects to eye such as in pathological myopia, Retinitis pigmentosa, and in glaucoma role of *vasthi* is vital.

AIMS AND OBJECTIVES

- To explore concept of *Vasthi karma* in various conditions of *Drishti Rogas*

- To establish the importance of Various *Vasthi* in the management of common Retinal diseases.

IMPORTANCE OF VASTHI AS CHAKSHUSHYA RASAYANA

VASTI – IMPORTANCE

Vasthi it is the most important therapeutic procedure in *Panchakarma* and regarded as the half of all treatment modalities. Among *Thridoshas Vata* is chief dominating factor because all *Dhatu*s and *Dosas* become functionless without *Vayu* [9]. *Pakwashaya* is the specific site for *Vata* and *Vasthi* specifically acts on *pakwasaya*. Thus *vasthi* is considered as *Vishesha chikitsa* for *Vata*. Charaka in *Sidhisthana* mentioned *Vata* is the most responsible factor to cause diseases in *Sakha* (Extremities) *Koshta* (GI tract), *Marma* (vital spots) and upper parts of body. Moreover collection and transportation of *Pitta, Kapha, Rasa, Rakta, Sweda, Mala, Mutra* etc are also under the control of *Vayu*[10]. When *Vayu* gets aggravated, there is no remedy other than *Vasthi* for its alleviation. So *Vasthi* is considered as half of the entire therapeutic measures. Charaka in *Chikitsa sthana* said *Vasthi* not only cures *Vata* diseases but moreover an important measure to treat *Pitta* and *Sleshma vikaras* also. It cures diseases due to *Rakta Samsargaja* and *Sannipatika* conditions. *Vasthi* though stays inside the body for few moments, its *Veerya*

spreads all over the body through micro channels like water transportation in tree. It snatches out all morbid *Dosas* from toe to head as sun in the sky sucks up the *rasa* from the earth [11]. On comprehensive analysis of indications of *vasthi* mainly included ailments due to *vata* vitiation creating whole body manifestations such as *Akshepaka*, (Convulsions) *Pakshagatha* (stroke), *Ekanga roga*, (debilitating neurological illness) *Sarvanga roga* (generalised neurological disorder) etc. On symptomatic exploration of these conditions these are various systemic conditions involving neurological manifestations. This indicates affinity of *Vasthi* towards nervous tissues which are under the control of *Vata dosa*. Correction of pathological changes and regeneration of nervous tissues to some extent is also capable through *Vasthi*. Based on site of action, dose of medicine, duration of procedure *Vasthi* is classified extensively. Choice of selection of *Vasti* is thus made easy depending on need of the therapy.

RETINA – ASTHYASRITA DHATU

Retina is the innermost tunic of eyeball. It is thin, delicate and transparent membrane. It is the most developed tissue of the eye. Anatomically extend from optic disc to orraserrata. Optic disc is a well-defined area where all the retinal layers terminate except nerve fibres which runs into optic nerve [12].

The treatment of the posterior segment ocular diseases presents a challenge for ophthalmologist due to the complex anatomy and physiology of eye. The common main outcome of posterior segment disorders is varying degrees of visual impartment and blindness. This posterior segment of the eye comprises the back two third of the eye including the vitreous humor, the retina, the choroid and the optic nerve. This specialised organ is composed of various static and dynamic barriers that restrict drug delivery into target site of action. This limitation could be overcome by using more effective drug delivery systems[13].

In Ayurveda most *Netrarogas* manifesting visual impairment as the major symptom is dealt in *Drishtigata Roga Adyaya*. *Drishti* is a wide concept composed of *Panchamahabhoota* with dominance of *Tejo Bhoota*. Various compositions of this *Panchabhoota* results in 3 *Dosas* and integrated into the structural and functional aspects *Drishti*. Each *Drishti patalas* (layers of eye) are combined forms of *Dhatus*. This inter relations of *Mahabhoota*, *Tridosas* and *Dhathu* can be established from the physiological and pathological manifestations of *Patalas*. Four *Abyantara drishti patalas* are described on the basis of their basement composition of *Dhatu*. *Drishti* is considered as refractive media starting from the optical zone of cornea and

up to the light perceiving part of retina and optic nerve. On critically analysing the 4th *patala* it seems closely related to retina. Various pathological conditions of retina are discussed under *Patalagata dosas* in *Drishti roga adyaya* by different *Acharyas*.

The innermost *Patala* of *Netra* is *Asthysritha*. Here the *Asthi asrita* should be taken as a supportive function and it is evident that retina is anatomically attached only in two points i.e. at ora serrata and optic disc. It is easily detachable in nature and will leads to marked visual loss in conditions like Retinal detachment. So retina need support for its existence and functioning. In human eye the structure which occupy vary close to orbital cavity and depend on the cavity is Retina. When the *Doshas* are located in 4th *Patala* vision will be seriously impaired and prognosis of the condition is very poor. Most of the retinal diseases are of this nature.

IMPORTANCE OF VASTHI IN NETRAROGA SAMPRAPTHI VIGHATANA

While exploring the *Samprapthi*, *Acharyas* described a generalized *Samprapthi* for all eye diseases. The *Doshas* vitiated by indulgence in foods and habits particularly harmful to the eyes (*Achaksusya aaharavihara*) propagate through the channels (*Sira*) towards *uttamanga* (the head) to produce diseases. Pitta being the predominant *dosha* in the pathology, the spread of this

dosha to the head through veins and getting localised in different parts of eyes including *vartma*, (Lids) *sandhi*(joints of eye), *sita- asita* (white and black portions of eye) and *Drishti* [14]. This movement is initiated and regulated by *vata dosha*. The state of vitiation of Vata causing *Pratiloma gati* (upwards movement) of the same. So along with pitta *Vata dosa* also deserves an equal and principal role in the entire pathogenesis. So keeping *vata* in its original state and at proper site is also important in the management of *netra rogas*. *vata* is already known for as predominant influence on the three principal routs of diseases such as *saakha*, *kostha* and *marma*, moreover *vata* is responsible for the formation, communication and spread of biological humours like *sweda*, *mala* etc and it is this *vata dosha* producing maximum number of *Nanaatmaja vikaras* (diseases due to vata alone) including *Drishti roga* like *Timira*. *Vasti* is being considered as the specific therapy for *Vataja rogas* and this is why *vasti* therapy is said to be half of whole treatment and sometimes a complete treatment [15]. Effects of *vasthi* are not limited only up to rectum and *Samsodhana* of *malas* (faeces), but it produces widespread systemic effects. Even though it is specifically indicated in *vatika* disorders, but with the addition of various types of medicines, it can influence all other *doshas*, *dhatus* and *adhishtanas* in the body.

Pakwasaya is the main seat of *vayu* and *vasthi* strikes the very root cause of *vata* and further normalizes its function. In *Apanavayu rodha* major presentations include GIT manifestations including *Gulma* (Gaseous disease), *Udavarta* (Gastritis) obstructions to normal passage of *vata*, *agni vadha* (impairment of digestive fire) and *Drishti vadha* (loss of vision). In the management of *Apanavayu rodha* and its complications *Vasthi* is considered as the key therapeutic [16]. While exploring the management of *Asthi dhatu dushti*, it reveals the importance of *vasthi*, chiefly *panchatiktaka ksheera vasti*. Analysing the above factors it shows at what extend *Vasti* is important to eye and what are the structures in eye that can be influenced with *vasthi*.

Vasthi can be incorporated to eye diseases in curative as well as preventive aspects. In *timira samanya chikitsa*, *Acharya Vagbhata* mentioned *vasthi* as a treatment modality [17]. In the management of *Netra rogas*, local therapeutics (*Netra kriyakalpa*) have vital role and along with internal medicines constitute the initial level of management of *Netra rogas* mainly symptomatic relief. After these local therapeutics pacification of *vata dosha* at *swasthana* and for the complete *samprapthi vighatana* (interruption of pathogenesis) *vashti* is important.

While exploring the indications of *vasti*, it mainly includes severe *Vata rogas* causing systemic manifestations such as *Ardita*, *Sarvanga vata etc* which shows affinity of *vasti* towards nervous tissues. Retina is predominantly a nervous tissue and various retinal pathologies are mostly systemic complications. At some instance retina produces vascular manifestations also. In all the above *Vasthi* can be judiciously administered.

In degenerative conditions like ARMD, Retinitis pigmentosa it shows the involvement of deeper *dhatu* such as *Asthi* and highly vitiated *vata dosa*. All these changes are capable of producing nervous tissue damage. Formulating *vasti dravyas* with drugs having *vata samana* and *brimhana* properties helps in the regeneration of neurological tissues.

DISCUSSION

While detailing the functions of *Vata* in *vatakalakalaakaleeya adyaya vata*, *Acharya Charaka* mentioned that *Vata dosha* is responsible for stimulation of all *Indriyas*. (is *sarvendriyanam mudyojaka* and *sarvendriyanam abhivoda*). In *Charaka sidhisthana*, while explaining the *samyak yoga* of *vasthi*, *Acharya* emphasised the *Budhi indriya samprasadanatwa* and *Indriyaprasada* function of *vasti karma*. Which also point towards the importance of *Vasti* in maintaining the health of Special senses. In

Vasthi prasamsa of Netrabasti pramana pravibhaga Chikitsa adyaya it is mentioned that by processing suitable *Dravyas vasthi* can result in *Samshodhana* and *Samshamana* (pacifying) effects. Can influence generalised *Brimhana* (body nutritive) functions for *krisha*(under nourished), *Karshana* (Depletion) for *sthoola* (over nourished), *Vajeekarana*(enhance virility) *Chakshu preenanam* (satisfies the eyes) and *valee – palitha nashanam*(Destroys wrinkles and greying) *Vaya sthapana*(Stabilise age), *Bala-Arogya* and *Ayu sthapana*(stabilise strength, health and life)[18].This context substantiates the systemic effect of *vasthi* including *jathrudha*(upper parts of body). Vagbhata mentioned *Vasthi* as one of the treatment procedure along with *Murhabasti*(oil Retention treatment of head), *Tarpana* (medicated ghee retention in eye), *Alepana* (paste form of medicine application) in *Samanya drishtiroga chikitsa*, again he had mentioned *Niruha* and *Anuvasana Vashti* procedure specifically for *VatajaTimira chikitsa*. All these authenticated that *vasthi dravyas* can make therapeutic actions on *netra* even in the presence of existing barriers.

Vasthi Karma can be adopted in many diseases by formulating *vasthi dravya* using specific drugs prescribed for that particular condition. Various types of retinal bleeding conditions can be broadly considered as a

form of *Urdhwaga raktapitta*, as *pratimargaharana* is the treatment principle and role of *vata* in the pathology, *Vasthi* can be considered as a best choice in the treatment. *Rakta-Pitta* are the local pathological factors involved in the bleeding disorders, so *Vasthi dravya* should be processed with suitable *Tikta-kashaya* drugs. So *panchatiktka ksheera vasthi* is a choice in Retinal bleeding conditions like NPDR, PDR, CRVO, Eale's disease etc.

In chronic stages of diseases *vata doshas* alone will becomes dominant Chronic Diabetic retinopathy (*vata pramehi*), Degenerative conditions like ARMD, Pathological myopia, Glaucoma also has *vata* as the chief vitiated *dosha*, thus neuroprotective forms of *vasthi (Brimhana vashti)* can be advisable for management. *Maduthailika vasthi*, *Sthiradi yapana vasthi* are basically *brimhana* in nature. In conditions like Retints pigmentosa and Optic atrophy moreover *brimhana*, *vata samana* is required thus *Erandamooladi kasaya vasthi* is best used. To treat conditions of excessive fluid collections in the Retina – CSR, CME *rooksha vasthi* like *Vaiswanara churna vasthi* can be performed. In clinical point of view, the various types of *vasthi* which is useful in various retinal pathologies can be summarized as follows:

Table 1 Showing the Basti and its uses in different Netraroga

<i>Ksheera vasthi</i>	Retinal bleeding diseases
<i>Thiktha Ksheera Vasthi with Patoladi ghrita</i>	Wet ARMD
<i>Lekhana vasthi</i>	Dry ARMD
<i>Yogavasthi with Madhuyashtyadi taila & Erandamooladi Kwatha</i>	Stargardt's Macular degeneration
<i>Ksheera vasthi with Vrisha Ghrita & Laksha swarasa</i>	Vitreous hemorrhage
<i>Madhuthailika vasthi</i>	Neuroprotection (Glaucoma)
<i>Sthiradi yapana vasthi</i>	Pathological myopia
<i>Brimhana vasthi</i>	Keratoconus
<i>Erandamooladi yoga vasthi</i>	Retinitis pigmentosa, Optic atrophy
<i>Rookshana - Vaiswanara choorna vasthi</i>	Central serous retinopathy.

CONCLUSION

Abhisyanadha is considered as the root cause for all eye diseases. In the initial stage, *Abhishyanada* can be considered as a *Samprapthi* for various *Jathrurdha rogas* and further exposure to the risk factor will decides *Sthanasamsraya* (localisation) ether in the *Netra*, *Karna Nasa* or *Shiras* itself. *Achakshuhsya ahara* and *Vihara sevana* leads pathologically vitiated *Doshas* along with *Dushya* to cause obstruction in the *Netravaha sira* (Microvascular and capillary occlusions). These sorts of obstructions for longer duration cause nutritive deficiency and impaired oxygen delivery to various structures of eyes especially posterior segment. Relieving the obstruction and restoring the normal functional atmosphere of eye is possible

through *Srotosodhana* (opening of channels of circulation) techniques like *Vasthi*. As *Vasthi* can be administered even in patients of *Agnimandya*, it can be used as an emergency treatment in acutely manifesting retinal diseases like Central serous

chorioretinopathy, vitreous haemorrhage, Central retinal vein occlusion etc. so suitable *Vasthi* also having a great importance in the various retinal pathologies as well as neuro-protection in progressive retinal neuropathies like glaucoma. Role of *Vata* is important in regulation of normal functions of *Indriyas* (sense organs) and perception of *Indriyarthas* (objects of sense organs) *Vasthi* is considered as the prime modality for *Vata Dosha*, it is not merely the enema; rather it is a highly complex, sophisticated and systemic therapy having

wider range of therapeutic actions and indications [19].

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