

MUCORMYCOSIS – A PREVENTIVE SCIENTIFIC APPROACH THROUGH AYURVEDA W.S.R. TO ANJANA APPLICATION – A SHORT REVIEW

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Article Received on
21 June 2021,

Revised on 11 July 2021,
Accepted on 01 August 2021

DOI: 10.20959/wjpr202110-21317

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ABSTRACT

The article reviews the basic effects of *anjana application* and also the ways and its types. As today's fast growing world and the people too have all left behind the actual way of living and concept of *dincharya*. Current scenario had shown us severe cases of mucormycosis specially after post covid infection. Understanding the effects of *anjana* as a preventive aspect against these mucor like devils and thereby following it in our daily routine as said by our acharyas, one can make him/herself less prone to all these diseases. Also a short therapeutic aspect is also overlooked, so that its working can be understood in either ways. A change in current life style and putting some useful processes as mentioned in our classics in the daily routine one can bring a healthy and disease free society in front. The paper will work in

this regards.

KEYWORDS:– *Anjana, Dincharya, Mucormycosis, Prevention.*

INTRODUCTION

Mucormycosis also called as zygomycosis is rare but a serious issue of concern now a days. It is basically caused by a group of molds called mucormycetes (fungus). These mycetes generally found in decaying organic matter such as leaves, compost matter, rotten wood etc. these fungi live throughout the environment. The spores from these molds are transmitted by inhalation via variety of percutaneous routes or by ingestion of spores. Human zygomycosis generally occurs in immunocompromised hosts as opportunistic infections. Risk factors include DM, neutropenia, sustained immunosuppressive therapies, chronic prednisone use, broad spectrum antibiotics. There are a variety of mucormycosis infections such as; *rhino cerebral (Sinus and Brain) pulmonary(Lung), gastrointestinal, cutaneous(skin) and disseminated mucormycosis*. The most common amongst all are *rhino cerebral and pulmonary* as it can be caused if some one breathes in spores, these are more common in people who takes medicines that lower body's ability to fight germs and infections like steroids and broad spectrum antibiotics. It is less common in immunocompetent hosts. Due to the covid outrage people have taken prolonged steroidal therapies and broad spectrum antibiotics too which is also a prior reason behind mucor prevalence in post covid hosts.

Ayurveda is better known for its preventive and ideal living aspect, and hence there are a number of incidences through which one can stop these kind of diseases from being prevalent. The main concern in mucormycosis is being seen in eyes specially. Acharyas in their treatises told about the ideal routine work from dusk to dawn known as *dincharaya*, in which there are procedures for eyes and oral cavity as well on daily basis. But today's work and people's busy work load having nil spare time leads to negligence of such useful and preventive measures. As far as we see negligence of such preventive aspects over modern lifestyles which basically detract people from activity and push them towards a sedentary lifestyle leaving behind the ideal traditional way of living collectively causes such life threatening disorders and many others too. *Netra anjan vidhan, kawal dharan, gandush dharan* in daily routine can play a drastic role in overcoming and preventing such mucor like devils. The paper will help in this regard and will reviews all such useful concepts mentioned above with their proper application measures.

Review of literature:– As if we explore the major symptomology of mucormycosis shows itching, dryness, sinusitis, redness of eye etc which are majorly *kapha vridhhi lakshanas*. Area where it manifests majorly are eyes and oral cavity i.e above clavicle region. In

Ayurveda area above clavicle is basically *kaph* dominant and hence procedures which helps in *kaph* suppression they all will be beneficial for diseases of that particular region. *Acharya Vagbhata* clearly stated that *chakshu(eyes)* are said to be *ushna satmya* i.e heat environment suitability, and also the most risky factor for eyes is *kaph* (*Chakshutejoayam tashya*). Therefore all these procedures like *anjan vidhan*, *kawal dharan*, *gandush dharan* all helps in suppression of *vitiated kaph dosha* and maintains it in equilibrium. *Acharyas* mentioned regular *anjana* application, *kawal- gandush dharan* in *dincharya* (daily routine) also. Hence the application and detailed administration of these procedures should be made clear to one and all.

Anjana therapeutic:— In Ayurveda *anjana* also called as collyrium or *kajal* as well is not only used for beautifications and cosmetics but also as a therapeutic measures as well in many diseases. We all are visual learners and we totally depend on eyes for our works and hence protection of eyes from such mucor like diseases is very important. *Sarvendriyanam nayanam pradhanam* i.e among all the sense organs eye is said to be the most important one. Girls and women are using this traditional collyrium for protection and beauty aspects since ages. *Anjana* is basically a paste like material applied on inner eyelids. It has multiple uses in maintaining the eye sight healthy and also in prevention of many diseases related to eye. On the basis of uses and contents *anjana* is classified into three major types –

Lekhanjana – Scrapping uses, mainly work in *kapha* predominant conditions.

Ropanjana - Healing uses, works in *pitta* predominant conditions.

Prasadanjana – Cosmetic and beauty uses, mainly works in *vaataj* disorders.

- **Lekhanjana**- These are basically scrapping collyriums. They are also known as *shodhan anjana* as they are cleansing in nature. They basically scrap morbid *doshas* from eyes, head and expel them through eyes, mouth and nose. They are made up of all herbs except sweet tastes. They are made up of herbs having tastes bitter, pungent, astringent, sour and salty. *Lekhan anjana* are basically scrapping in nature, it scraps out unwanted tissues, *doshas* from the eyes and eliminates them all through eyes and nose.
- **Ropanjana:**— These are basically healing collyriums. These are prepared from *kashay and tikta ras dravyas mixed with Sneha*. It heals and repair the damaged tissues and heals them rapidly. Healing improves the color and visual activity.
- **Prasadanjana:**— They are basically purifying or *prasadanjanas*. They are prepared from *Madhur ras dravyas* and pacify *vaataj dosha vikaras*. It pacifies the *doshas* of vision.

Anjana Matra – As per *acharya sushrut* on the basis of formulation, *anjana* are mainly of three types

- *Gutika (Pills)* – In strong *dosha bala*.
- *Raskriya (Semi-solid)* – In medium *dosha bala*.
- *Churnanjana (Powder form)* – In low *dosha bala*.

S. n.	Types	Lekhanjana	Prasadanjana	Ropanjana
1	Gutika	1 harenu	1 ^{1/2} harenu	2 harenu
2	Raskriya	1 harenu	1 ^{1/2} harenu	2 harenu
3	Churna	2 shalaka	3 shalaka	4 shalaka

Basically *anjana matra* depends upon the *dravyas* used in its making. They are grossly of two types *teekshna anjana* and *mridu anjana*. Dosage of *gutikanjana* of *teekshna* variety is *harenu* (40mgm) while of *mridu* variety is just the double of it. Dose of *raskriya* for its *teekshna* variety is *vella matra* (20mgm) while for its *mridu* variety it is twice of it.

The dosage told by the *acharyas* are given but presently the dosage depends on many things like *desh*, *kaal*, *prakriti*, *tolerance of the patient etc.* That's why to use the least dose for the first time is better and then gradually one can increase them.

Indication of anjana – *Anjana* should be applied when *doshas* are manifested in eyes and after purification of the whole body. Body should be detoxified before *anjana* therapy through *vaman*, *virechan*, *nashya*, *basti*, *raktmokshan etc.* *Acharya sharangdhar* and *bhavprakash* also quoted the time of administration as per seasons such as

In afternoon – *Hemant & Shishir*, in morning – *greeshma*, in evening – *Sharath*, anytime – *in vasant*.

Mode of action

Drug penetrates through conjunctiva



Increases the lacrimal secretions



And hence thereby improves local circulation.

Anjana preventive aspect – To maintain the vision potency and also to protect eyes from several diseases *anjana therapy* should be used daily as in the routine schedule. *Acharyas*

also mentioned it in *dincharya* i.e can be applied regularly and should be applied. *Sauveer anjana* has been quoted by charak for daily use, it is a variety of anjana among the five types. Its *rasas* are *tikt, katu and Kashaya* while *dhumra, snigdha and hima* are its properties. *Vipaka* is also Madhur and hence it performs *vrana ropana, shodhana and drikprashadan karm*. It is mentioned by acharya charaka in *dincharya* and hence it should be applied daily so as to maintain vision and to avoid various diseases of eye.

Accharya *sushruta and vagbhatt* quoted *strotoanjana* in *dincharya* i.e can be and should be used on daily basis. It is also a type among the 5 types of *anjanas*. Its *rasas* are *Kashaya and madhura* and *snigdha* by its properties. *Vipaka* is *sheeta and hence* due to *Kashaya ras* and *prabhav* it performs *lekhana and grahi karmas*. It should be used daily as it is mentioned by acharyas under *dincharya*, so as to maintain vision, eye health and also to prevent various eye disorders.

DISCUSSION

The overall literary review of mucormycosis symptomology, anjana application and *dincharya* reveals that application of *anjana* as a part of daily routine as mentioned by different acharyas also can play a great role in preventing various eye disorders and also in maintaining eye sight normal and healthy. As we have seen that all *anjanas* are *kaphhar* in nature as they work by increasing the secretion and thereby removing the accumulated *mal* from the eyes. Also acharya *vhagbhatt* clearly quoted that *chakshu* are *ushna satmya* i.e hot labile or habitual and they should be protected from *kaph dosha* always and at any cost.

On the other hand if we take mucormycosis the symptomology it presents itching, sinusitis, discharge which are mainly *kaph vriddhi lakshanas*, and also the sight where it shows its effects mainly are eyes, oral cavity etc which are all above clavicle region. In Ayurveda above clavicle region is mainly said to be *kaph* predominant and hence all the procedures which suppresses *kaph dosha* will be beneficial for the eyes. Hence by accessing the above discussion and literature it can be said that *anjana* application in daily routine and also as a therapeutic aspect in both way it can work and infact work well. So its way of administration and its types and ways have to be made clear to the people and to Ayurveda fraternity is well.

CONCLUSION

Eyes are precious organ and has to be protected as everyone is dependent on eyes for all their colorful vision and world. Hence its protection from various diseases is mendatory and must

for all. And therefore *anjana* application as a part of *dincharya* and also as a therapeutic aspect should be adopted. All different types of *anjanas* can be applied accordingly as per the need and *dosha sambandh*, while *sauveer* and *strotoanjana* can be applied as a part of daily routine and hence thereby various diseases like mucormycosis can be prevented and can also be cured to some extent.

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