To Study the Efficacy of Vyoshyadi Varti Anjana in Arma
With Special Reference to Pterygium

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Introduction:

In Ayurveda, ‘Shalakya tantra’ is a branch dealing with urdhwajatrugata vikaras of Karna, Netra, Nasa, Mukha etc with its Lakshanas and Chiksts. In Ayurveda Samhita Grantha ‘Arma’ is described under ‘Shuklagata netraroga’. ‘Arma’ is a mansal vruddhi developing either from Kaneenika or Aapanga Sandhi, which may progress towards Krishna Mandal. According to modern science ‘Arma’ can be correlated with eye disease ‘Pterygium’ which is a wing shaped fold of conjunctiva encroaching upon cornea from either side within interpalpebral fissure. Also with that pathologically ‘Pterygium’ is a elastotic proliferation of subconjunctival tissue. Pterygium is commonly found in region of hot dusty and sandy weather and due to ultra violet irradiation (common in farmers and outdoor workers). Though in our Samhitas, Arma is mainly explained as a Chedan Sadhya vyadhi, along with there are so many Aushadi yogas explained for Arma in the form of Aschyotana, Anjana, Lepa, etc. As in modern science, only symptomatic treatment is explained for inflamed Pterygium prior to surgical intervention. So it has been decided To study the efficacy of ‘Vyoshyadi Varti Anjana’ in ‘Arma’ w.r.t to ‘Pterygium’

Arma: It grows continuously therefore it is called Arma.

Prastari Arma, Shukla Arma, Kshataja Arma, Adhimamsa Arma and Snayu Arma are the Stypes of Arma explained by Acharya Sushrut.

Prastari Arma- is the Arma which is Tanu, Vistrna, Mrudu, Neel, Raktavarni, Vedana rahit.
Shukla Arma- is the Arma which is Mrudu, Shweta varni, slow growing
Kshataja Arma- is the Arma which is Mrudu, Slakshan, having color of red lotus.

Adhimamsa Arma- is the Arma which is Pruthu, Sthula, Mrudu, having Yakrut varna.
Snayu Arma- is the Arma which is Kathina, Vistrut, Sushka, Mansa yukta, having Shweta Varna.
The Arma which is small, thin, yoghurt like, and blue, red or brown in appearance are be treated on Chikitsa Sutra explained for Shukra Vyadhi. Though in our Samhitas, Arma is mainly explained as a Chedan Sadhya vyadhi, along with there are so many Aushadi yogas explained for Arma in the form of Aschyotana, Anjana, Lepa, etc.

Clinical features of pterygium-

• ‘Pterygium’ is a wing shaped fold of conjunctiva encroaching upon cornea from either side within the interpalpebral fissure.

• Generally ‘Pterygium’ is an asymptomatic condition but when it gets inflamed it exhibits Clinical features like redness, watering, foreign body sensation, etc

• Sometimes it produces astigmatism due to corneal encroachment.

Classification of Pterygium-

(ref. Clinical ophthalmology- Jack J. Kanski ) Type I- extends less than 2mm on cornea
Type II- involve upto 4mm of cornea
Type III- involve more than 4mm of cornea and involve visual axis.

Vyoshyadi Varti: Churna of Trikatu, Neelkamal, Kushtha, Haridra and Rasanjan will be taken in sama pramana and sufficient amount of jala is taken to soak the powders and varti is made. That varti will be given to patient and advised to apply as Anjana in Arma.

Objectives:-
1. To study the ‘Arma’ as per Ayurvedic literature.
2. To study the efficacy of ‘Vyoshyadi Varti anjana’ in ‘Arma’.
3. Detailed study of ‘Pterygium’.

Materials and Methods: Materials
The patients selected for this study with ‘Vyoshadi Varti Anjana’.
Sunthi churna - 1 Part Maricha churna - 1 Part Pippali churna - 1 Part Neelkamal churna - 1 Part Kushtha churna - 1 Part Haridra churna - 1 Part Rasanjan- 1 part Jala - As required amount of jala will be taken sufficient to soak the churna. And varti will be made with proper vidhi and advised to apply on Arma.

According to Sharangdhar Samhita purvakhanda, the drugs should be taken in equal quantity (Sama Bhaga) when the Amount of drug is not mentioned, so all Aushadis in above Yoga are taken in Sama Praman.

Methods :
Anjana Vidhi: The eye is turned laterally by the left hand, the Anjana should be applied with Shalaka held in right hand beginning from the inner to the outer side or from the outer side to the inner side along the fornix, and the rod should also be moved to and fro. For better results of anjana yoga appropriate poorva and paschyat karma will be followed during anjana vidhi.

Study Design: Clinical Study Place of study – OPD and IPD of Post Graduation Department of Shalakyatantra (Netra vibhag)

Details of Study Subject- The subjects of two groups will be treated for 20 days.

TYPE- Randomized comparative study.

I. Group A (Trial Group) In this group 30 patients will be treated with ‘Vyoshadi Varti Anjana’ in respective eye for 20 days in the sayankala (evening).
II. Group B (Control Group) In this group 30 patients will be treated with Ocupol-D eye ointment in respective eye for 20 days in the evening. *The detailed clinical history and clinical examination including Arma (pterygium) will be noted on specially prepared case sheet. The written consent will be taken from each subject.

Period of Study – 20 days
Follow Up – Follow up will be taken on 0 day , 5th day , 10th day, 15th and 20th day. 0 day will be the day of examination.

Inclusion Criteria –
1. Patients having lakshana of Aushadi Sadhya Arma as per samhita grantha. 2. Patients between 18years- 60 years of age. 3. Sex- either sex 4. Patients with Pterygium Type I (Pterygium extending upto 2mm on the cornea)

Exclusion Criteria –
1. Patients of age group below 18 years and above 60 years. will be excluded from the study.
2. Patients with Chhedya and Asadhya Arma (Pterygium) as per Samhita Grantha are excluded.
3. Patients with Pterygium Type II (Pterygium extending up to 2mm on the cornea) and Type III (Pterygium extending more than 4mm on the cornea)
4. Pterygium associated with other ocular conditions are excluded eg. Pterygium with symblepharon, etc

Subjective Parameters:
1. Redness (congestion of pterygium vessels on bulbar conjunctiva)
2. Watering (due to reflex hyper-lacrimation)
3. Foreign body sensation

Objective Parameters:
1. Mansal vruddhi (mass encroaching upon cornea)- length and width of Pterygium will be measured using ‘Schirmers Strip’ in ‘mm’
   *Measurement of ‘Pterygium’ looks much more easier using the measurements on Schirmers strip as compared to Caliper.

Criteria For Assessments:
- According to Samhita Grantha ‘Arma’, is painless growth on shukla bhaga of eye i.e. ‘MANSAL VRUDDHI’ (mass encroaching upon cornea): Growth of the ‘Pterygium’ tissue which can be assessed, on the basis of criteria of length and width of ‘Arma’. Length can be measured from limbus to apex of lesion in ‘mm’ where as width can be measured at level of limbus with help of ‘Schirmer’s strip’ in ‘mm’.
- According to modern science: ‘Pterygium’ is asymptomatic condition, but it shows symptoms like redness, Foreign body sensation, watering when it is inflamed.
  i) Redness- (congestion of Pterygium vessels on bulbar conjunctiva) Patient complaints redness of eyes, after exposure to heat, dust or chronic irritation. It is the congestion of pterygium vessels when it becomes inflamed and irritated.
  ii) Watering: Watering of eye is characterized by overflow of tears by conjunctival sac. In Pterygium watering is due to ‘Reflex Hyper-lacrimation’ i.e. due to irritation of conjunctiva and cornea due to irritation of pterygium band. iii) Foreign Body sensation

Grading and scoring:
1) Redness of eye: (congestion of pterygium vessels on bulbar conjunctiva) 0-No redness (congestion of pterygium vessels) – eye is quiet, i.e. white, 1–Mild redness (congestion of pterygium vessels) - eye is bright red with clear pattern of blood vessels is visible, 2–Moderate redness (congestion of pterygium vessels) – eye is red with poorly visible pattern of blood vessels, 3-Severe redness (congestion of pterygium vessels) – eye is dark red with velvety conjunctiva or loss of blood vessel pattern
2) Watering: 0 – no watering - absence of watering 1- Scanty watering - increased tearflow out of the eye 2- Moderate watering - outflow of tears four- five times per day 3- Profuse watering - outflow of tears most of the times in a day
3) Foreign body sensation: 0- no foreign body sensation 1- Mild foreign body sensation -present but not troublesome. 2- Moderate foreign body sensation - troublesome but not interfering with normal activity. 3- Severe foreign body sensation - interfering with normal activity.
Observation and Results:

Effects of Vyoshyadi Varti Anjana on Arma Group A:

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Group A

Effects of Ocupol-D Eye Ointment on Arma Group B:

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Group B
Discussion: All the patients related to observation made during the study and results will be discussed depending upon follow ups, sex predominance, etc. Also the karya karan bhaav and Samprapti vighatan with Vyoshyadi varti anjana will be discussed.

For Group ‘A’ .i.e. for ‘Vyoshyadi varti anjana’ –
After the treatment of 20 days there was no change in length of arma (Pterygium). Thus, according to assessment criteria (as per synopsis) patients were uncured for length and width i.e. No change in length and width of arma.

For group ‘B’ i.e. for ‘Ocupol-D eye ointment’ –
After the treatment of 20 days there was no change in length of arma (pterygium). Thus according to assessment criteria patients were uncured for length i.e. No change in length of arma.

Conclusion:
Data was collected on specially prepared case sheet results were analyzed statistically and following conclusion is drawn.
It is concluded that, ‘Vyoshyadi varti Anjana’ highly significant to reduce local redness, watering and foreign body sensation related to Pterygium but it does not act on reducing the length and width of pterygium. So ‘Vyoshyadi varti Anjana’ is safe, easiest treatment for the management of Arma for getting symptomatic relief.

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