

HARIDRA (CURCUMA LONGA) AND ITS EFFECT ON ABHISAYANDA (CONJUNCTIVITIS)

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ABSTRACT: 50 cases of conjunctivitis studies comparatively with Haridra Eye Drops and with Soframycine Eye Drops, Clinically and bacteriologically observed that Haridra Eye Drops has a definite role on conjunctivitis. Bacteriological study shows the Haridra has a role to act on E. Coli, St. Aureus Klebsheilla and pseudomonas organisms.

Ayurveda is known for its existence and efficacy from times immemorial. Though, it is an old science, it has eight specialized branches of medicine. SALAKYA is one among them deals with the upper parts of neck which includes the brain, eyes, ears, nose, teeth and oral cavity. Though Netrarogas of 76 included in the Salakya, but SUSRUTA¹³ among others like CARAKA⁵ and VAGHAHATA¹¹ ETC., ELABORATELY DESCRIBED IN 19 CHAPTERS (Susruta Sambita Ut) and in many places they mentioned that "NETRAJNA" Or NETRA CHIKITSK:" (those who are specialiesd and treat the eye diseases) shows that this subject of "NETRA" is a separate entity or speciality.

"ABHISAYANDA is a common Netra (Ocular) Roga where eye produces more secretion (ABHI = Excessive, SAYANDA = Secretion or Moist) and it is considered as an AUPA SARGIKA^{3,10,11,12} (Contagious) by various way like close contacts, cloths

and cosmetics etc. with all the above said statements and its clinical signs and symptoms can co-relate with the modern ocular disease of the conjunctivitis". It is a common ocular extra infectious disease in developing countries and in the west.

It has been divided into 4 types by Susruta² and others as (i) Vataja (ii) Pithaja (iii) Kaphaja and (iv) Raktaja. Caraka excluded Raktaja and added Sannipata. They mentioned enormous treatment for it. Haridra (Curcuma-Longa or Turmeric) is an easily available, cheap, highly claimed as Krimighna⁶ drug selected and studied clinically and bacteriologically on scientific way on conjunctivitis in the Department of ophthalmology at Government Nizamia General Hospital, Hyderabad.

Haridra is available freely in India and in tropics, and extensive literature is available in modern science about it. Basu quotes that Haridra has an antibacterial activity. Arora

et al experimental work on rats has shown that it has an antiinflammatory effects. Umagupta¹⁴ and Mehra et al⁸ suggested to use it in Non-ulcerative Keratitis. Haridra's qualities like Tridoshaghna, Vishaghna, Soshaghna, Vranahara and Kandoohgna^{6,9} are considered necessary to act on Abhisyanda.

Material and Method

50 cases were selected mainly based on clinical finding and symptoms. Out of them, 15 were male, 12 were female and 23 were children (Table I). 25 cases were selected under the Haridra Eye Drops and 25 cases were under Soframycine 5% Eye Drops for comparative study which is non-irritant, and a broad-spectrum antibiotic to all ocular infections.

TABLE-1 Distribution of the Patients, Sexwise.

Sex	No. of Patients
Male	15
Female	12
Children	23
Total	50

The clinical signs and symptoms were present according to the following. Nistodana in 40, Sangharsha in 35, Sirobhitapa in 30 (All three conditions belong to Vata), Daha in 42 cases, Paka in 41, raga in 48 cases, Bahsphadhikyata in 25 cases (PITTA) BGurutva in 28 cases, Kandu in 34 cases and Sravam in 39 cases (Kapha) Table 11/) were the main findings observed. All these cases were studied for

Conjunctival secretion culture for Microorganisms.

Table –II Shows the Symptoms and Signs in Number of patients.

S.No.	Signs/Symptoms	No. of cases
1.	Nistodanam	40
2.	Sangharsha	35
3.	Sirobhitapa	30
4.	Daha	42
5.	Paka	41
6.	Raga	48
7.	Guruvtva	28
8.	Kandu	34
9.	Srava	39

Preparation of the Haridra Eye Drops (Procedure adopted as per JANAKI and BOSE)

The dried Haridra powder (300 grams) is extracted in Soxhlet apparatus with Benzene for 48 hours. The extract is collected and freed of the solvent with rotavapour. The residual material is treated with Alcohol and crystallized after it is filtrated under reduced pressure. Now, original yellow crystals of curcumin that are chromatographically pure were obtained with mp 180. The curcumin is dissolved in 1% solution of sodium hydroxide and diluted with about 30 ml of distilled water and filtered. The solution consisting sodium salt-Di-Sodium curcumin is of Pheny1 group and so not require preservatives of sterilization. These drops are filled in 3 ml of sterilized amber bottles for easy

dispensing. The pH of these drops is 7.5 while the normal pH range of Conjunctival secretion is 6.8 to 7.5¹ (Ref.).

After careful examination, 25 cases were given Haridra eye drops and the other 25 cases were given Soframycine drops and were asked to instill 4 to 5 times in each eye every day with strict hygienic measures. All these patients were examined daily for 7 days.

Observations and Results

All the 25 cases who received the Haridra Eye Drops started subsiding from 3rd day and all the others subsided on 6th day, except the 2 cases of Kandu that remained even after 6th day also. Ragatva was the predominant one which responded earlier than others.

All the 25 cases who received Soframycine Eye Drops also subsided from 4th day and complete relief took for 7 days, except in two cases the duration took for 9 days.

Conjunctival culture study has shown E. Coli in 17 cases, Staphylococcus aureus in 14 cases, Klebsheilla in 5 cases, Pseudomonos in 4 cases and Sterile in 10 cases (Table III).

In the Haridra eye drops group, E.Coli was seen in 10 cases, Staphylococcus aureus in 7 cases, Klebsheilla in 3 cases, Pseudomonos in 2 cases and sterile in 6 cases. E. Coli and St. aureus infection casse responded well and were completely cured in 4 days except oneeach of Klebsheilla and Pseudomonos cases did not respond.

TABLE-III Drug Response, Correlated to Bacterial Aetiology

S. No.	Name of the Micro Organism	No of the cases under C. Longa Eye drops	No of the cases under Soframycine Eye drops
1.	E.Coli	10	7
2.	Staphylococci	7	7
3.	Aureu	3	2
4.	Klebshella	2	2
5.	Pseudomonas	6	4
	Sterile		

In the Soframycine Eye Drops group, E.Coli and St. aureus cases responded well. Three cases, one from Klebsheilla and two from Pseudomonos, were not responsive to the treatment.

Discussion

Ocular antibiotics are plenty to cure the Conjunctivitis but they are costly and produce resistance to the Conjunctiva in the long usage. Cheap, harmless and easily available drug is needed to the developing countries, Haridra is a drug which has the above said wualities and proven work done by the earlier workers^{2,4,8,14} These facts made us to take up this clinical study.

The results of our study indicate that some definite, subjective, clinical and bacteriological effects on Conjunctivities take place with the Haridra Eye Drops.

All the clinical findings subsided on 6th day except in 2 cases. Soframycine which is also good in action, but in 3 cases the duration

took for 9 days. It shows that by the virtue of Haridra and its multifarious actions like Varnya, Kandughna and Vishaghna may be possible to reduce the clinical findings. Soshatva of Haridra quality may be the predominant feature to reduce the excessive secretion.

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