EUROPEAN JOURNAL OF BIOMEDICAL AND PHARMACEUTICAL SCIENCES
http://www.ejbps.com

ISSN 2349-8870
Volume: 3
Issue: 10
397-400
Year: 2016

EFFICACY OF TRIPHALA GHRUTA NETRA TARPANA IN DRY EYE SYNDROME

Dr. P.P. Jagtap[1]*, Dr. A.H. Bhor[2], Dr. N.S. Amrute[3] and Dr. Shende K.L.[4]

*[1,2]Asst. Prof. Dept. of Shalakyatantra, Dr. D.Y. Patil College of Ayurved and Research Center, Pimpri, Pune 411018, M.S. India.
[3]Prof. Dept. of Shalakyatantra, Dr. D .Y. Patil College of Ayurved and Research Center, Pimpri, Pune 411018, M.S. India.
[4]Asst. Prof. Dept. of Kayachikitsa, Dr. D.Y. Patil College of Ayurved and Research Center, Pimpri, Pune 411018, M.S. India.

***Corresponding Author: Dr. P.P. Jagtap**
Asst. Prof. Dept. of Shalakyatantra, Dr. D.Y. Patil College of Ayurved and Research Center, Pimpri, Pune 411018, M.S. India.

Article Received on 14/08/2016 **Article Revised on 04/09/2016** **Article Accepted on 24/09/2016**

INTRODUCTION

Dry eye is a multifactorial disease of the tears & occular surface that results in symptoms of discomfort, visual disturbance and tears film instability, with potential damage to the ocular surface. It is accompanied by increases osmolarity of the tear film & inflammation of the ocular surface.

Dry eye disease is affecting millions of people in the world. It is observed in all countries, more common in women as compared to men & more common above the age of 50 years. There are many reasons for dry eyes such as age, exposure to smoke, fluorescent light, air pollution, wind, heat, air conditioning, dry climate, contact lens, different eye drops, systemic medicines such as antihistamines, antihypertensive, oral contraceptive, diuretics, Lasik surgery for refractive error, systemic disorders like rheumatoid arthritis, diabetes, thyroid, abnormality due to over use of computers.

Dry eye is a frequent cause of ocular irritation that leads patients to seek Ophthalmologic care. If the disease is further neglected it may lead to various complications ending up in corneal blindness and end- ophthalmitis. So a timely diagnosis and management is necessary to arrest the progression of the disease. Conventional approach in treating Dry eye is to lubricate the ocular surface by artificial tear drops. The goal of artificial tears is to increase humidity at the ocular surface and to improve lubrication but it fails to correct the underlying basic pathology. The preservatives in these preprations again are the proven causes of inducing dry eye.

Need of study

As there is no good treatment for dry eye a search is necessary from ayurvedic literature to find out some solution to this problem.

Ayurvedic science explains the disease & management on the basis of Tridosha theory. From the clinical features. We can assume the involvement of vata dosha. Increased rooksha guna of vata reduces the snigdha quality of eye & leads to malnourishment of ocular surface. So this condition can be considered as vata predominant roga. So the line of treatment should be of vata shamana. i.e., Bhruhna therapy.

In ayurvedica literature Netra Tarpana is mentioned as a local treatment So, Tarpana is local nutrition to eye. In the present study of Triphala Ghruta will be used which is prepared according to standard ghruta vidhi. As Triphala ghruta has chakshushya property it is selected for present study.

AIM AND OBJECTIVE

To study the efficacy of Triphala ghruta Netra tarpana in Dry eye syndrome.

MATERIAL AND METHOD

Drug information

Drug information of Triphala ghruta will be collected.

Triphala Ghruta: Triphala Ghruta for Netra tarpan is mentioned in Ashtang Hridya.

The fine paste & decoction of triphala mixed with cow's milk and taken internally will destroy thye disease of eye.

Ingredients of Triphala Ghruta

Contents:	Quantity:
Triphala paste	10g
Cow's ghee	40g
Cow's milk	40ml
Triphala decoction	160ml

Procedure of Netra Tarpan

Netra Tarpan is local nutrition of eye which is provided by cows clarified butter i.e., ghruta. In netra tarpan corneal and conjctival surface is directly kept in contact with 'medicated ghruta'for 10 to 25 minutes according to requirements of severity of disease. In present study Triphala Ghruta is used which is warmed to bring it to body temperature. Medicated and melted ghruta is slowly poured into the conjuctival sac & patient is instructed to close and open eyes 8-10times in a minute for better circulation of medicine.

Methodology

The study of this project is totaaly based on the clinical observations & patients narrations.

Total 30 patients suffering from dry eye syndrome will be randomly selected in out patient department of Dr. D.Y Patil Ayurvedic College and Research centre.

Inclusion criteria

Patients suffering from dry eye will be selected on a randomized basis irrespective of age, sex, marital status, educational status & Nature of work.

Exculsion criteria

-Patient suffering from sjogren's syndrome
-Patient with local systemic infective disorders of eye, cataract, glaucoma, degenerative disorders.

Method: Triphala Ghruta Netra Tarpan will be administered to selected patients for 15 minutes per day for 7 days & patients will be monitored on 1st and 7th day.

Assessment Criteria

Subjective criteria

1)Burning	**Grade**	
	0- absent	
	1- mild	Routine work is not disturbed
	2 -moderate	Patient can manage routine work with discomfort
	3- severe	Routine work is hampered
2) foreign body sensation		
	0- absent	
	1- mild	Routine work is not disturbed
	2-moderate	Patient can manage routine work with discomfort
	3- severe	Routine work is hampered
3) feeling of dryness		
	0- absent	
	1- mild	Routine work is not disturbed
	2-moderate	Patient can manage routine work with discomfort
	3- severe	Routine work is hampered

Objective Criteria

1) Schirmer I- test		
	0- Normal	>15mm
	1- mild	< 15mm
	2- moderate	< 10 mm
	3- severe	< 5mm
2) Tear film brake uptime (TBUT)		
	0-Normal	>15sec
	1- mild	<15sec
	2-moderate	<10sec
	3-severe	<5sec

All clinical observations will be recorded in a tabular form as follows-

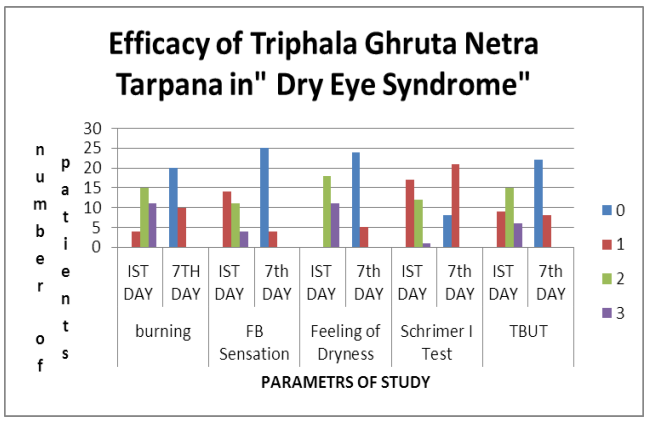
Sr. No.	**Criteria**	**Gradation**	
		1st day	**7th day**
1	Burning sensation		
2	Foreign body sensation		
3	Feeling of dryness		
4	Schirmer I test		
5	Tear film brake up time		

OBSERVATION AND RESULTS

- In the present study, total 30 patients having clinical features of Dry eye syndrome were registered.
- Among 30 patients 19 patients were female and 11 patients were male.
- Statistically significant clinical improvement was observed in burning sensation. In 20 patients (66.66%) it was absent on 7th day of the study.
- 25 patients (83.33%) were relived completed from foreign body sensation on 7th day of the study.
- 24 patients (80%) were relived completed from feeling of dryness on 7th day of the study.
- In case of Scirmer's test 8 patients (26.66%) were having normal test on 7th day.
- Highly significant results were observed in TBUT in 22 patients (73.33%).

Master Chart

sex	Age	Burning		FB sensation		Feeling of dryness		Schrimer I test		TBUT	
		1st day	7th day	1st day	7th day	1st day	7th day	1st day	7th day	1st day	7th day
F	33	2	0	3	1	3	1	2	1	2	0
M	21	3	0	2	0	3	0	3	0	3	1
M	30	1	0	2	0	2	0	1	0	1	0
F	31	2	1	1	0	2	0	1	0	1	0
M	65	3	1	2	1	3	0	2	1	2	0
F	90	1	0	1	0	2	0	1	0	2	0
F	27	3	0	2	0	3	0	2	1	2	0
F	65	2	1	1	0	2	0	2	1	3	1
F	60	3	1	2	0	3	1	2	1	3	0
M	68	2	0	1	0	2	0	1	0	1	0
F	17	3	1	1	0	3	1	2	1	2	1
F	45	2	0	2	0	2	0	1	1	2	0
F	20	3	1	1	0	2	0	1	0	2	1
M	56	2	0	3	1	2	1	1	1	3	1
M	68	3	0	2	0	2	0	1	1	2	1
M	40	2	1	3	1	2	0	2	1	2	0
F	20	1	0	2	0	2	0	1	0	2	0
F	20	2	0	3	1	2	1	1	1	1	0
F	62	3	0	2	0	2	0	2	1	2	0
F	30	2	0	1	0	3	0	2	1	3	1
F	30	3	1	3	0	3	0	2	1	2	0
M	38	2	0	1	0	2	0	1	1	1	0
F	22	2	0	1	0	2	0	1	1	1	0
M	26	3	0	1	0	3	0	2	1	2	0
F	40	2	1	2	0	3	0	1	1	1	0
M	25	2	0	1	0	2	0	1	1	1	0
M	60	1	0	1	0	2	0	1	0	1	0
F	21	2	0	1	0	3	1	1	1	2	0
F	19	3	1	2	0	3	0	2	1	3	1
F	34	2	0	1	0	2	0	1	1	2	0



CONCLUSION

Local administration of drug i.e. Netra Tarpana with Triphala Ghruta was found to be effective to treat the subjective and objective parameters of Dry eye syndrome. It is highly significantly effective on the most of assessment parameter ($P < 0.001$). So, we can say that Dry eye syndrome is better managed by Triphla Ghruta Netra Tarpana.

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