



To study efficacy of Guduchyadi Rasakriya Anjana in the management of Arma (Pterygium).

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ABSTRACT

Arma Vyadhi, as described in Ayurveda, closely resembles pterygium in contemporary ophthalmology. A randomized, single-blind, placebo-controlled clinical trial was used to assess the therapeutic efficiency of Guduchyadi Rasakriya Anjana. 40 patients diagnosed with Arma were randomly allocated into two groups. The treatment group received Guduchyadi Rasakriya Anjana, whereas the control group was administered distilled water eye drops for 21 days. The intervention produced minimal improvement in the size of the pterygium, visual disturbances, and astigmatism. However, significant relief was observed in symptoms such as conjunctival redness, foreign body sensation, and excessive lacrimation. These findings indicate that Guduchyadi Rasakriya Anjana may be beneficial in relieving symptoms and could have a role in preventing recurrence.

Keywords: *Anjana, Guduchyadi Rasakriya, Pterygium, and Arma.*

INTRODUCTION

Arma is categorized under Shuklagata Netra Roga in Ayurvedic literature. Although Acharya Sushruta considered Chedana Karma (surgical excision) as the principal treatment for Arma, he also described medicinal therapies for selected cases. Lesions that are thin, small, smooth, and exhibit characteristic bluish, reddish, or brownish discoloration are considered suitable for conservative management similar to the treatment principles of Shukra Vyadhi^[1]. Various Anjana Kalpanas have been mentioned in the classical texts for managing such ocular disorders.

From the modern ophthalmic perspective, Arma is comparable to pterygium, a triangular fibrovascular proliferation of the bulbar conjunctiva that progressively extends onto the corneal surface^[2].

Depending on its corneal involvement, pterygium can be categorized as:

- Type I: Extends less than 2 mm onto the cornea.
- Type II: Extends up to 4 mm onto the cornea.
- Type III: Extends beyond 4 mm onto the cornea and may involve the visual axis.

At present, surgical excision remains the primary treatment for pterygium. However, recurrence following surgery is relatively common, and there is no universally accepted medical therapy that effectively prevents disease progression or recurrence. Therefore, exploring Ayurvedic therapeutic modalities, particularly Guduchyadi Rasakriya Anjana, may provide a promising conservative approach for the management of Arma^[3].

OBJECTIVE

To Evaluate the effect of Guduchyadi Rasakriya Anjana in Arma (Pterygium)

MATERIAL AND METHODOLOGY

Study design - Randomized comparative clinical study

Study Plan - A total number of 40 Arma patients were registered and split into two groups at random. For 21 days, Group-A was given Guduchyadi Rasakriya Anjana, and Group-B was given placebo eye drops (distilled water).

Posology

- Group A - Guduchadi Raskriya Anjana once a day for 21 days in the evening.
- Group B - For 21 days, a placebo (distilled water) eye drop was administered once daily in the evening.

Drug Preparation

Table 1: Guduchadi Raskriya Anjana Ingredients^[4]

Drugs	Quantity
Guduchi (<i>Tinospora cordifolia</i>)	200gm
Madhu (Honey)	50 gm
Saindhava Lavana (Rock Salt)	50gm

Inclusion criteria

1. Patients between the ages of 25 and 55 were included.
2. According to the Samhita Grantha, the Arma that are medically treatable were chosen.
3. Individuals with Arma (Pterygium type 1, meaning it extends less than 2 mm on the cornea) were chosen.

Exclusion Criteria

1. Patients less than 25 and more than 55 years.
2. According to the Samhita Grantha, patients with Chhedya and Asadhya Arma (Pterygium) were not included.
3. Individuals with type II and type III pterygium (involving up to 4 mm of cornea), more than 4 mm and involve the visual axis) were not included.
4. Other illness that impair vision are not included.
5. Pterygium and related eye disorders were not included.
6. Patients who were unwilling to participate in the trial and who did not receive appropriate follow up.
7. Individuals with severe illness such as cancer, heart problems, Hepatitis, diabetes, asthma, renal impairments, tuberculosis, and other illness. This trial did not include any serious illness or conditions.

Clinical Assessment Subjective Criteria

1. Redness - 0,1,2,3
2. Foreign body - 0,1,2,3
3. Waterying - 0,1,2,3

Objective Criteria

1. Pterygium length measured in millimeters from the limb using a caliper.
2. Pterygium width measured with a caliper at the limb in millimetres.
3. Visual disruption: $6/6 = 0$
 $6/9 - 1$
 $0/12 - 2$
 $6/18 - 3$
 $6/24 - 4$
 $6/36 - 5$
 $6/60 - 6$

4. Amount of astigmatism

No - 0

<1 – 1

<2 – 2

>2 – 3

This study's observations were documented in accordance with the evaluation criteria, and statistical analysis.

OBSERVATION AND RESULTS

Length of Pterygium

Length in Group A is 0.8 ± 0.4104 before treatment and ± 0.4104 after treatment. S.D. is 0.8 ± 0.4104 , and Guduchyadi is indicated by P value summary N.S. ($P > 0.05$). In patients in Group A, Rasakriya Anjana has not noticeable on length.

It is likewise not significant in Group-B, which is to be expected.

The P value summary for both groups is N.S., meaning that $P > 0.05$ indicates both Placebo eye drops and Guduchyadi Rasakriya Anjana do not significantly shorten the duration of Arma.

Visual acuity disturbance

P value summary N.S., or $P > 0.05$

This indicates that there is no significant reduction in visual disturbance in either group.

Astigmatism

P value summary N.S., or $P > 0.05$

This indicates that there is no significant decrease in astismalisam in either group.

Redness

Before treatment, Group A - mean $\pm$ S.D. was 2.5 ± 0.6882 ; after treatment, it was 0.35 ± 0.4894 , P is less than 0.001. Guduchyadi Rasakriya Anjana is highly significant to reduce Redness, while compare with Group-B which P value summary N.S. i.e. $P > 0.05$ not significant.

Foreign Body Sensation

Group A - pre-treatment mean $\pm$ S.D. is 1.65 ± 0.4894 , and its post-treatment mean $\pm$ S.D. is (0.8 ± 0.6156) , and Guduchyadi Rasakriya is indicated by a P value summary of $P < 0.001$.

Guduchyadi Anjana is extremely significant in contrast to Group B, whose P value is $P > 0.05$, which is not significant.

Watering

Prior to treatment, Group A - mean $\pm$ S.D. was 1.45 ± 0.6863 , and the mean $\pm$ S.D. following treatment is (0.6 ± 0.5026) , with a summary of the P value being Guduchyadi Rasakriya Anjana is highly significant in reducing watering ($P < 0.001$). In contrast to Group B, which is not significant ($P > 0.05$).

Signs and symptoms	Group	Relief Percentage
Redness	A	86
	B	2.08
Foreign body	A	51.51
Sensation	B	2.77
Watering	A	58.62
	B	3.12
Astigmatism	A	0
	B	0
Visual Disturbance	A	0
	B	0
Length	A	0
	B	0
Width	A	0
	B	0

Percentage of relief

DISCUSSION

- The study's objective was to assess the effect of Guduchyadi Rasakriya Anjana in Arma (Pterygium). In total 40 patients were evaluated clinically. chosen for this trial based on the Methodology criteria and split equally between two groups. 20 patients in Group A received Guduchyadi Rasakriya Anjana once every day in the evening for 21 days. 20 patients in Group B received "Placebo eye" treatment i.e 1^o q.i.d. for 21 days.

- The outcome was evaluated based on the decrease in Arma (pterygium) size. We also looked at other criteria, including subjective criteria. containing watering, redness, and the feeling of a foreign body, as well as objective criteria that include Astigmatism, width of Arma, and visual disturbances were measured. The results were statistically examined.
- Arma (Pterygium) cannot be made shorter or smaller with Guduchyadi Rasakriya Anjana. However, the medication significantly reduces redness and the feeling of having a foreign body. It also, does not reduces width of Arma (Pterygium) and visual disturbances and Astigmatism occurred by Pterygium.
- The exact mechanism of action of groups were tried to explain. 30(75.00%) patients were observed literate. Occupation wise maximum belongs to outdoor work category 20(50%). Maximum patients were consuming mixed diet i.e. 30 (75%), 31 (77.5%) were seen from middle class. Arma (Pterygium) found unilaterally in 31 (77.5%) patients.

CONCLUSION

Treatment with Guduchyadi Rasakriya Anjana once daily for 21 days did not produce a significant reduction in pterygium length, width, induced astigmatism or visual acuity. However, significant improvement was observed in symptoms such as redness, foreign body sensation, and watering of the eyes. These findings indicate that while short-term therapy provides symptomatic relief, a long-term therapy and formulation modification may be required to achieve the results.

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