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# A COMPARATIVE CLINICAL STUDY OF PATOLADI KASHAYA GANDUSHA AND PANCHVALKAL KASHAYA GANDUSHA IN THE MANAGEMENT OF TUNDIKERI WITH SPECIAL REFERENCE TO CHRONIC TONSILITIS

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#### INTRODUCTION

Ayurveda, is the holistic healing Shastra, deals with the concept of individual approach. The preventive and curative aspects of individual life related entities are summed up in main eight branches of Ayurveda. Shalakyatantra, the branch of Ayurveda dealing with the medicinal, parasurgical and surgical approach towards the management of the diseases occrring in the parts above the Jatru (Clavicle). The name of the branch it self suggests the utility of instrumental intervention for diagnostic and therapeutics purposes.

The man is climbing the steps of sophistication and simultaneously moving away from nature due to irregular, unaccustomed food and behavioral habits, modified life style, hurry, worry, greed, anger, pollution etc has become the part of his life. These factors disturb the core control of health (Tridoshas) and make the individuals prone to many disorders.

Tundikeri Is a Talugata / Kanthagata Vyadhi characterized by hard swelling at the conjoining part of Hanu resembling the fruit of Karpasa associated with Kathina Shotha, Manda Ruk, Paka, Toda, etc. The symptoms of Tundikeri resembles with Chronic Tonsillitis. The prevalence of the disease is more in the children and less frequent in the aged persons. In early childhood during infection the tonsils enlarge to meet this challenge but they should revert to their normal size when the infection and symptoms subside. Due to recurrent attacks and incomplete treatment, tonsils fail to regain its normal shape and size. This may leads to several health hazards like recurrent upper respiratory tract infections, growth retardation, RHD, RF, SAEC, bronchial asthma, snoring and its related complications, etc. Looking into above facts there is a need of treatment which can prevent complications of the disease as well as reduces the recurrence effectively.

# Hypothesis

# ➤ Null Hypothesis (H0)

Patoladi kashaya gandusha is not more effective than panchvalkal kashaya gandusha in the management of Tundikerī.

# > Alternate Hypothesis (H1)

Patoladi kashaya gandusha is more effective than panchvalkal kashaya gandusha in the management of tundikerī.

# AIM AND OBJECTIVES

#### Aim

➤ To prove the *patoladi kwath gandusha* is clinically eeficacious in the Management of *Tundikeri* compared to *Panchvalkal kwath gandusha*.

# **Objectives**

- To evaluate the efficacy of *Patoladi kashaya* gandusha in *Tundikeri*.
- > To evaluate the efficacy of Panchvalkal kashaya gandusha in Tundikeri.
- > To compare the efficacies of patoladi kashaya gandusha and panchvalkal kashaya gandusha in the management of tundikerī.

# MATERIALS AND METHODS

# Literary study

- All the available *Samhitas* of *Ayurveda* and other ancient & modern texts of *Ayurveda*.
- > Texts of allied medical sciences, etc.
- > Journals, research papers, articles from different periodicals, and newspapers etc. and subject related information available on internet.
- ➤ The conceptual part was based on the thorough observation, compilation and analysis of the matters collected from above sources.

#### **Clinical Study**

- 1. Methods of collection of data
- a) Selection of patient: patients attending O.P.D of department of *Shalakya Tantra*, Parul Ayurveda hospital with sign & symptoms of *Tundikeri* irrespective of their sex, religion, occupation, habitat.
- b) Research Proforma: Random sampling technique was utilized for collection of data. An elaborative case taking proforma was specially designed for the purpose of incorporating all aspects of the disease on Ayurvedic and modern parlance.
- c) Consent: written informed consent was taken from all registered patients for trial.

#### 2. Study design

Patients were divided into two groups as Group 'A' and Group 'B' with 15 patients each according to their date of admission alternatively.

- ➤ **Group A (Trial Group)** in this group patients were treated with *Patoladi kashaya gandusha* three times in one sitting in morning for 15 days, follow-up were taken on 7<sup>th</sup>, 15<sup>th</sup>, 30<sup>th</sup> and 45<sup>th</sup> day.
- ➤ **Group B** (**Control Group**) in this group patients were treated with *Panchvalkal kashaya gandusha* three times in one sitting in morning for 15 days, follow-up were taken on 7<sup>th</sup>, 15<sup>th</sup>, 30<sup>th</sup> and 45<sup>th</sup> day.
- In both the groups, clinical findings and symptoms before and after treatment was observed and same was recorded in the proforma of case sheet.

#### 3. Selection Criteria

# A. Sample size: 30

#### B. Inclusion criteria

- Patients presenting with classical features of tundikeri
- ➤ Patients in the age group of 10-40 years, irrespective of sex, occupation and religion

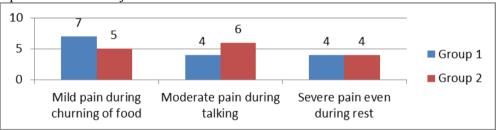
# C. Exclusion criteria

- Patients with complications of tonsillitis like Peritonsillar Abscess, tonsillar cyst, tonsillolith.
- ➤ High grade fever due to respiratory infection.
- Patients who are contraindicated for gandusha
- Patient suffering from any other systemic disorders that may interfere with the course of treatment.

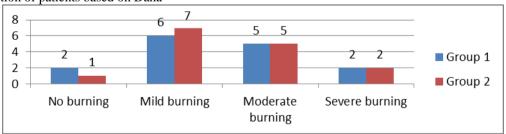
#### **OBSERVATION**

- For the present clinical study 34 patients ranging from age 10-40 years were registered. They were divided into two groups according to their date of registration alternatively. Out of 34 patients, 04 patients were discontinued from the study. The rest 30 patients completed the clinical trial. Outcomes were measured after the completion of the treatment by both objective and subjective criteria.
- ➤ Data analysis consisted of two parts, first part to describe the characteristic of the study subjects by using descriptive methods viz. general points like age, gender, Marital status, etc.

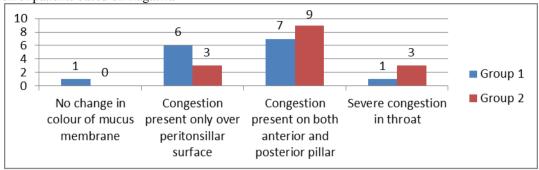




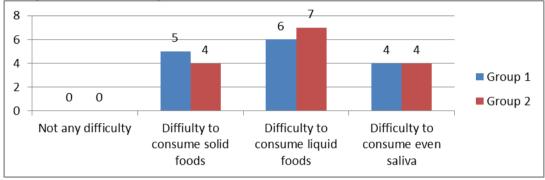
#### > Distribution of patients based on Daha



Distribution of patients based on Ragatwa



Distribution of patients based on Galoparodha



**RESULTS**Statistical analysis was done for the results using **student t - test** at 5% level of significance.

Overall result in Group A

Symptoms	Mean	Mean Rank		% of diff.	SD	SE	Т	P	Remarks
	BT	AT	(d)	% OI UIII.	שפ	SE	1	r	Kemarks
Ruja	1.87	1.13	0.74	39.57	0.961	0.24	3.761	< 0.01	S
Daha	1.90	1.10	0.8	42.10	0.594	0.153	1.740	< 0.01	S
Size of tonsils	1.97	1.03	0.88	44.67	0.509	0.131	3.055	< 0.01	S
Ragatwa	1.97	1.03	0.88	44.67	0.632	0.163	2.449	< 0.001	S
Galoparodha	1.93	1.07	0.86	44.55	0.743	0.192	2.779	< 0.001	S
Halitosis	1.83	1.17	0.66	36.06	0.352	0.91	1.468	< 0.05	S
Lymphadenopathy	1.97	1.03	0.94	47.71	0.640	0.165	2.824	< 0.001	S

Overall result in Group B

Symptoms	Mean	Mean Rank		% of diff.	CD.	SE.	Т	P	Remarks
	BT	AT	( <b>d</b> )	% OI UIII.	SD	SE	1	r	Kemarks
Ruja	1.80	1.20	0.6	33.33	1.033	0.267	4.756	< 0.05	S
Daha	1.80	1.20	0.6	33.33	0.799	0.206	4.525	< 0.05	S
Size of tonsils	1.80	1.20	0.6	33.33	0.696	0.175	6.874	< 0.05	S
Ragatwa	1.83	1.17	0.66	36.06	0.799	0.206	6.141	< 0.05	S
Galoparodha	1.87	1.13	0.74	39.57	0.941	0.243	4.938	< 0.05	S
Halitosis	1.60	1.40	0.2	12.5	0.414	0.106	7.483	< 0.01	S
Lymphadenopathy	1.90	1.10	0.8	42.10	0.961	0.248	4.298	< 0.01	S

# Comparison of both the group

Comparison of overall result in between group

PARAMETERS	GROUP	MEAN	% of diff.	SD	SE	T	P	Remarks
Ruja	G-1	0.74	39.57%	0.639	0.165	0.871	>0.05	NS
	G-2	0.66	33.33%	0.617	0.159	0.671		
Daha	G-1	0.88	42.10%	0.861	0.222	2.324	>0.05	NS
	G-2	0.66	33.33%	0.507	0.130	2.324		
Size of tonsils	G-1	0.88	44.67%	0.516	0.133	2.246	>0.05	NS
	G-2	0.66	33.33%	0.617	0.159	2.240		
Halitosis	G-1	0.66	36.66%	0.487	0.125	2.824	>0.05	NS
	G-2	0.22	12.5%	0414	0.106			
Ragatwa	G-1	0.88	44.67%	0.516	0.133	1.969	>0.05	NS
	G-2	0.22	36.06%	0.593	0.153	1.909		
Galoparodha	G-1	0.86	44.55%	0.910	0.235	2.174	>0.05	NS
	G-2	0.74	39.57%	0.560	0.144	2.174		
Lymhadenopathy	G-1	0.94	47.71%	0.833	0.215	3.051	<0.01	S
	G-2	0.88	42.10%	0.414	0.106	3.031		

# DISCUSSION RECURRENCE

After stopping *Patoladi kwatha Gandoosha* in group A 08 patient got excellent improvement, 05 patients got good improvement and in 02 patient recurrence was seen with less severity of *ruja*, *daha*, *ragatwa* as well as *galoparodha*.

In group B 08 patients got moderate improvement, 05 patients got good improvement and in 02 patients recurrence was seen.

This is because of the unwholesome activity of the patients which are habits which are enough to cause the recurrence before the *doshas* are completely expelled, So medicine continued in such cases until there is no more relapse.

# Overall effect of the therapies

By observing the overall effect of therapies after treatment in group A showed that excellent relief was found in 08 patients, good improvement seen in 05 patients and in 02 patients recurrence was seen.

That means 53.33% patient got excellent relief, 33.33% patient got good relief, 13.33% patient got recurrence in group A.

While in group B 08 patients got moderate improvement, 05 patients got good improvement and in 02 patients recurrence was seen.

That means 53.33% got moderate improvement, 33.33% got good improvement and 13.33% got recurrence.

Hence, from the above results it is been observed that *Patoladi kashaya Gandusha* provides better effect in patients of *Tundikeri* than *Panchvalkal kashaya Gandoosha* so alternate hypothesis was accepted.

No side effects of the drug were observed during the course of study during or after treatment. Both the *kwatha Gandoosha* is proved to be cost effective and safe drug for *tundikeri*.

#### **CONCLUSION**

- According to statistical analysis, alternative hypothesis is accepted. From clinical observation, with % difference of 9.88%, it can be concluded that *Patoladi kashaya* is more effective than *Panchvalkal kashaya gandusha* for the treatment of *Tundikeri*.
- ➤ The disease *Tundikeri* described in Ayurvedic classics has close similarity with tonsillitis.
- ➤ Both the groups showed significant results on all the cardinal and associated features of Tundikeri.
- ➤ Overall result of all the symptoms in group A was 42.76% of relief while in group B was 32.88% of relief.
- The use of local therapy in the form of gandusha using drugs which have *vranasodhana*, *vranaropana* and *shothahara* properties constitutes the basic therapeutic approach in resisting most symptoms of *Tundikeri*.

#### Suggestion for further Study

Further study can be carried out by

- Increasing the sample size.
- ➤ Increasing frequency of *Gandusha*.
- > Comparing with a standard control.
- > Increasing the duration of study for chronic tonsillitis.
- Study may be carried out on acute tonsillitis for shorter duration.

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