

EFFICACY OF "YASHTIMADHU – KANKOLA" KWATH IN THROAT DISORDER".

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ABSTRACT :

Throat disorders are one of the most troublesome and irritating problems of modern era. Owing to increased pollution, allergens etc. in today's industrial world, the incidences of throat disorders have increased rapidly resulting in high rates of morbidity and becoming the commonest cause of patients' visit to ENT clinics. Throat is considered as common route pathway for the respiratory and digestive tract. Any kind of alteration in normalcy in structure and structural based function in throat region has been considered as *kantha roga* in Samhita. "*Galagrah*" is one them among all disease.

Increased frequency of any disease can be cured by the specific line of treatment which works upon the root cause of disease. Sometimes Allopathic line of treatment gives a better result but it's prolong use is prohibited so there is need to choose other drugs which fulfil both above parameter of selection. "*Yashtimadhu – Kankola*" Kwath has proven to be the drug combination that can be utilized as *kawala*, on regular basis to avoid or accelerate the resolution of the condition.

Key words: *Galagrah* (Pharyngitis), *Kankola* (*Piper cubeba*. Linn.), *Phayrnx*, *Yashtimadhu* (*Glycyrrhiza glabra*)

INTRODUCTION: Health status of specific society depends upon various factors beside proper nutritious food, surrounding environmental factor plays an important role specific in disease related to eye, ear, nose and throat disorder. Among those, air and water pollution are prone to precipitate in disease of nose and throat disorder. One of the throat disorders is "*Galagrah*" which may be presented same as like sign and symptoms of Pharyngitis. Pharyngitis is a common cause of throat discomfort; the condition may cause due to infection/irritation of the pharyngeal mucosa.

In today's era after seeing to limitation of allopathic line of treatment in area of recurrent and chronic type of disorder draws focus towards to Ayurveda line of treatment. It gives better relief because it corrects the root of disease which is

connected with *Pachana Kriya*. So presenting study has been done with "*Yashtimadhu – Kankola*" Kwath drug as in *Kawala* form in treatment of "*Galagraha*" which is given here.

Here "*Galagraha*" word itself clear to explain its meaning i.e. holding kind of sensation in *gala pradesh* of body. Explanation of word *Gala* has been clearly mentioned in Samhita. According to *Yogaratanakar*, *Ostha*, *Dantamoola*, *Danta*, *Jivha*, *Talu*, *Gala* and *Galadi* are the seven parts of mouth¹. The part of *mukha* where the process of *nigiran* takes place is termed as "*Gala*"². *Induteekakar* states that *gala* is specific *sharir avavya* which situates internal to *kantha pradesha*³ and It is stated as a *sthana of kapha dosha*⁴.

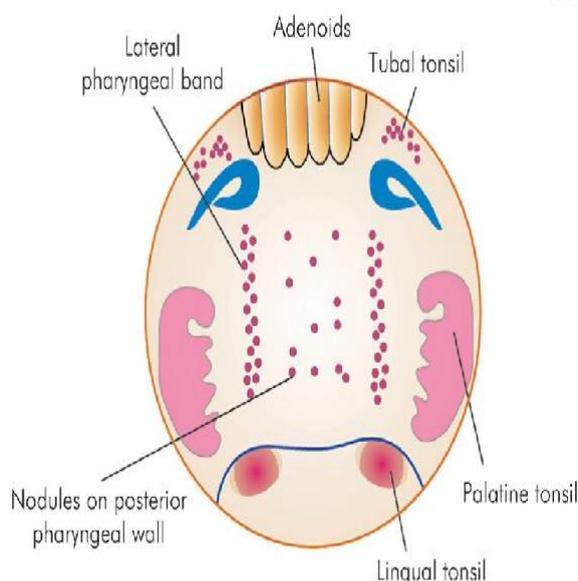
As per modern review *Gala Pradesh* may be presented as pharynx region. Pharynx is a fibro-muscular tube, serves as a

continuation of the digestive cavity, providing a route from the oral cavity proper to the oesophagus. In addition, the pharynx communicates with the nasal cavity, the middle ear cavity, and the larynx. It extends from the skull base to the sixth cervical vertebra (lower border of the cricoid cartilage).

Structure of pharyngeal wall:

From within out wards it consists of 5 layers-

1. Mucous membrane
2. Sub-mucous layer



Pharyngeal nodules localize in the posterior pharyngeal wall primarily involved in case of pharyngitis. Changes can be seen in size and shape in these lymphoid tissue. These lymphoid tissues are small at birth, and increases in size till age of 8 – 10 years. Then onwards gradually recedes in size, and becomes steady from age of 20 years.

AYURVEDIC DISEASE REVIEW:

According to *Sushruta galaroga* are the diseases occurring in the Gala, synonyms *Galamaya*, *Galaroga*, and *kantharoga*.⁵ *Charakacharya* describes – *Galaroga* as *shopha* Pradhan diseases. Due to *prakopa* of *kapha dosha*, which resides in the gala Pradesh, generates acute inflammatory

3. Pharyngeal aponeurosis (pharyngobasilar fascia)
4. Muscular coat
5. Bucco-pharyngeal fascia

Sub-mucous layer contains the waldeyer's ring, which the sub-epithelial collection of lymphoid tissue scattered in the pharynx. This lymphoid ring has efferent vessels, but there are no afferent vessels. The waldeyer's ring consists of following collections of lymphoid tissues-

- Palatine tonsils (faucial tonsils)
- Nasopharyngeal tonsils
- Tubal tonsils – in the fossa of Rosenmuller behind the opening of the Eustachian tube.
- Lingual tonsils – spread on the posterior-third of the tongue.
- Lateral pharyngeal bands behind the posterior faucial pillars.
- **Pharyngeal nodules – in the posterior pharyngeal wall.**

changes, this can be termed as Galagrah.⁶ Consumption of meat of fish, buffalo, pig, animals that of *Aanupa Pradesh*, pumpkin, reddish, leftover water after boiling flesh, curd, milk, kanji, cane extract, , sleeping in head low position, not brushing the teeth properly, not doing *dhoompana*, *vamana*, *kawal* & *gandusha* properly, and not performing *sira vedha* at appropriate time are the *hetu* of *Mukha Roga (Galagrah)*.⁷ When the *kapha dosha* gets vitiated due to above *hetu*, gets settled in the *Mukha(Gala) Pradesh* generates the diseases.⁸

As per *Charaka* When vitiated *kapha* goes in Gala Pradesh and stays there and



acutely generates painful inflammation (*shotha*), it is called "GALAGRAH".⁹

It causes obstructive sensation in *Gala Pradesh*.¹⁰

According to *Kashyapa*, the symptoms of this ailment are *Jwar, Aruchi, mukha Strava, kandu in gala, shwyathu, and shiroruja*.¹¹

Similarly, all above presentation of disease can be seen in inflammation occurs in different area of pharynx and collectively named as pharyngitis.

- Acute pharyngitis is very common and occurs due to varied etiological factors like viral, bacterial, fungal or others. Viral causes are more common.

- Chronic Pharyngitis may be superimposed by acute pharyngitis.

- Milder infections present with discomfort in the throat, some malaise and low-grade fever. Pharynx in these cases is congested but there is no lymphadenopathy.
- Moderate and severe infections present with pain in throat, dysphagia, headache, malaise and high fever. Pharynx in these cases shows erythema, exudate and enlargement of tonsils and lymphoid follicles on the posterior pharyngeal wall.
- Very severe cases show edema of soft palate and uvula with enlargement of cervical nodes.

Acute Pharyngitis	Chronic Pharyngitis
1) Raw sensation 2) Pain 3) Refusal to eat in children 4) Hoarseness of voice 5) Constitutional Symptoms like malaise, fever, headache, and tachycardia.	1. Discomfort or pain in the throat 2. Foreign body sensation in throat 3. Tiredness of voice. 4. Cough Throat is irritable and there is tendency to cough. Mere opening of the mouth may induce retching

AIM: To "Study the Efficacy of *Yashtimadhu-Kankola Kwath Kawal*" in *Galagrah* with special reference to Pharyngitis.

OBJECTIVES:

- To Study *Galagrah* in detail according to *samhitas*.
- To Study the drugs *Yashtimadhu & Kankola churna* in detail individually.
- To Study the efficacy of "*Yashtimadhu-Kankola Kwath Kawal*" in *Galagrah*.

- To Study properties of chlorhexidine 0.2%w/v Liquid according to modern science.

MATERIAL & METHODS: This study was done as a randomized clinical trial, in two group's viz. trial group consisting of the medicine under study i.e. *Yashtimadhu-Kankola Kwath* and control group treated with Chlorhexidine liquid Gargles. Each group consisted of 30 patients. *Pathya - apathya* explained, follow up taken and results were observed. The study was entirely conducted at Bharati Medical foundation's *Ayurved*

hospital, in Department of *Shalakya Tantra*.

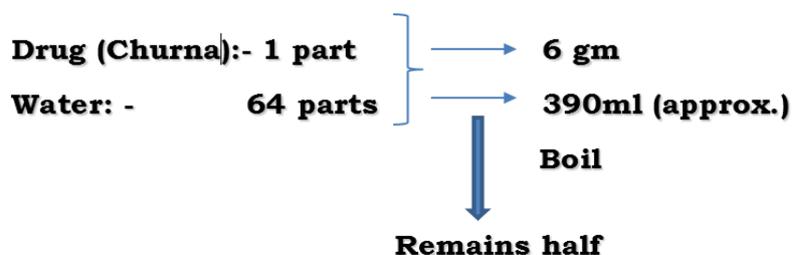
Data and statistical analysis: Data of both the groups was collected, tabulated and compared for the effect of trial drug. Statistical analysis was done using Wilcoxon signed rank tests.

Content of drug:

1. *Yashtimadhu mula churna* – fine powder roots of *Glycyrriza glabra*

2. *Kankol churna* – dried fruits of *Piper cubeba*.

dried fruits of *Yashtimadhu-Kankola Churna* should have both the drugs in equal amount (1-3 gm) in dry powder form. Preparation method for *Kwatha* according to *Shrangdhar* mentioned as ¹²-



This prepare *kwath* use as in *kawala* form. *Kawala* is one of method of local drug administration. When liquid is filled in mouth to such a level that it can be moved easily, is called '*Kawala*'. In this study total quantity of prepared drug approx. 200 ml -2 cups had been used.

Control group Drug: Contents: Chlorhexidine **0.2% w/v** It is the only content of drug. Preparation of Control group Drug : 8-10 drops of Chlorhexidine liquid in 200 ml of water.

METHODOLOGY:

INCLUSION CRITERIA:	EXCLUSION CRITERIA:
1. Patients suffering from <i>Galagrah</i> .	1. Patients below 10 years and above 55 years of age were not selected.
2. Patients suffering from Pharyngitis.	2. Patients suffering from rhinitis.
3. Patients in the age group of 10 to 55 years were selected.	3. Lower respiratory tract infected patients.
4. Selection was irrespective of sex, religion & socio economical class.	4. Any other major systemic disease.
	5. Psychosomatic and mentally challenged patients.

Dosage & follow up:

- Trial group: - *Yashtimadhu-Kankola Kwath Kawal*
- Dose: - 200 ml *Kwatha*
- Duration: - Up to 5 minutes, twice a day for 7 days.
- Control group: - Chlorhexidine liquid Gargles
- Dose: - 200 ml solution
- Duration: - *Up to 5 minutes*, twice a day for 7 days.
- {N.B.-1 CUP=100 ml}

Follow-up: following 5 Assessment parameter had been decided for this study and follow up done on 0, 2nd, 4th, 6th day

1.	<i>Galashool</i> (Pain in throat)
2.	<i>Aaraktata</i> (Posterior wall congestion)
3.	<i>Sakashta Nigaran</i> (Difficulty in swallowing)
4.	<i>Aruchi</i> (Anorexia)
5.	<i>Shirah shool</i> (Headache)

OBSERVATION AND RESULTS: following results has been observed for above mentioned five subjective assessment parameter. All the observation were recorded on basis of narrations of patient.

S.no.	Subjective parameter assessment	Effect on trial group	Result observed in trial group	Effect on control group	Result observed control group
1.	<i>Gala Shool</i>	Before Treatment, mean score of Trial Group was 2.43, which reduced to 0.20 after treatment.	91.8%	Before Treatment, mean score of Control Group was 2.37, which reduced to 0.10 after treatment.	95.8%
2	<i>Gala Aaraktata</i>	Before Treatment, mean score of Trial Group was 2.73, which reduced to 0.50 after treatment.	81.7%	Before Treatment, mean score of Control Group was 2.73, which reduced to 0.43 after treatment. 84.1% Result was Observed.	84.1%
3	<i>Sakashta Nigrahan</i>	Before Treatment, mean score of Trial Group was 2.30, which reduced to 0.20 after treatment.	91.3%	Before Treatment, mean score of Control Group was 2.23, which reduced to 0.10 after treatment	95.5%
4	<i>Aruchi</i>	Before Treatment, mean score of Trial Group was 1.13, which reduced to 0.00 after treatment.	100%	Before Treatment, mean score of Control Group was 1.13, which reduced to 0.00 after treatment	100%
5	<i>Shirah shool</i>	Before Treatment, mean score of Trial Group was 1.53, which reduced to 0.03 after treatment.	97.8%	Before Treatment, mean score of Control Group was 1.47, which reduced to 0.03 after treatment	97.7%

Using Wilcoxon Signed Rank Test, P-Value less than 0.01, shows significant result after treatment.

DISCUSSION: After thorough Discussion of all the observations found throughout the treatment period, one can draw a definite conclusion. In ancient period Acharya use to do *Sambhasha Parishad* before drawing any conclusion. *Tadvidya Sambhasha* is said to be the best method of enhancing knowledge according to *Maharsi Charaka*, which indicate the importance of discussion in the research work.

Modern protocol was used for discussion and elaboration of this study. The entire discussion can be divided into several parts for proper understanding Such as:

- *Galashool* - There is significantly better relief of symptom observed in both groups.

Probable action of drug:

Yashtimadhu:

Category	Attribute	Effect & Action
Rasa	<i>Madhura (sweet), tikta (bitter)</i>	<i>Decreases sticky nature of kapha</i>
Guna	<i>Guru (heavy), Snigdha (oily)</i>	<i>Vata-pittaghna</i>
Virya	<i>Shita (cold)</i>	<i>Vata-pittaghna</i>
Vipaka	<i>Madhura (sweet)</i>	<i>Pittaghna, daha shaman, soothing action</i>
Doshakarma	<i>Vata-Pitta Shamak (alleviate Vata and Pitta Dosha)</i>	

Kankola

Category	Attribute	Effect & Action
Rasa	<i>Katu, Tikta</i>	<i>Kaphaghna</i>
Guna	<i>Laghu, Ruksha, Tikshana</i>	<i>Kaphaghna</i>
Virya	<i>Ushana</i>	<i>Kaphaghna</i>
Vipaka	<i>Katu</i>	<i>Kaphaghna, vataghna</i>
Doshakarma	<i>Kapha-Vataghna</i>	

❖ Combined action of *Yashtimadhu-Kankola Kawatha – Tridoshaghana*.

- When compared to both the groups *yashtimadhu-kankola kwath kawala* was found nearly as effective as that of chlorhexidine liquid (0.2%). *Yashtimadhu-kankola kwath kawala* can be considered

- *Galaraktata*- There is significantly better relief of symptom of observed in both groups.
- *Aruchi*- There is significantly better relief of symptom of observed in both groups.
- *Sakasta nigiran* - There is significantly better relief of symptom of observed in both groups.
- *shirah shool* - There is significantly better relief of symptom of observed in both groups.

According to the observations it was found that the symptoms like *gala shool, aaraktata, sakashta nigaran, aruchi, shirah shool*, were significantly relieved with *yashtimadhu-kankola kwath kawal*.

as safe and effective therapy for *galagraha*.

Probable mode of action: relief of all the symptoms may be contributed to the properties of *yashtimadhu-kankola kwatha*. During the treatment period,

pathya-apathya should be followed specially.

CONCLUSIONS: Galagraha and Pharyngitis can be co-related. Yashtimadhu--Kankola Kwath Kawal can be considered as an effective treatment in Galagrah (Pharyngitis).Effect of Yashtimadhu--Kankola Kwath Kawal in Galagraha is as good as Chlorhexidine liquid (0.2%), and is proved to be safe and effective drug.

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