

EFFICACY OF KHARJURADI LEHA IN KASA WITH SPECIAL RELATION TO UPPER RESPIRATORY TRACT INFECTION IN CHILDREN

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ABSTRACT

Kasa being the lakshna of pranavahaSrotasDusti, It needs to relieve urgently. As the persistence of pranavahasrotas dusti of all other srotas leading to hazardous complications. The present study entitled was planned to evaluate the efficacy of KharjuradiLeha in Kasa with not only suppressing Kasa but also provide nutrition during that period, so that the child is not deprived of nutrition. The aspect of treatment that was the cost of the treatment also needed to be evaluated and not only just efficacy and acceptability and the palatability. So KharjuradiLeha which is easy to prepare and palatable of small children of selected from YogRatnakar to be dispensed and evaluate its acceptability and

efficacy.

KEYWORDS: Kasa, Pranvahasrotas, Kharjuradi Leha.

INTRODUCTION

Acute Respiratory Infection (ARI) is very common in Pediatric age group and most of these are airborne spreading commonly by droplet method and cannot be completely prevented. ARI include both upper respiratory infection lower respiratory infection of which upper respiratory infection is more common and are easily recovered morbid state irrespective any disease stops not only the anabolic activity but rewards it the baby in catabolic state. Upper respiratory tract infections generally present with symptoms of cough, vomiting during bouts,

rhinorrhea and Fever. Presence of cough disturbs the routines and decreases productivity of cough the individual. Because cough is partially produced due to forceful expulsion of the air from the lungs as reflex action to irritation and also associated with spasmodic contraction of muscles of the chest walls. Cough is the fifth most common symptom for which patients seek care. Cough occurs in association with acute upper respiratory infection, acute pharyngitis, acute bronchitis and chronic sinusitis, all of which rank among the top 10 reasons for visiting family physicians. Persistent cough lead to chest pain and the infection can be further passed on to lower Respiratory Tract infection and might cause grave complications. According to Vagbhata, due to Nidanasevana vitiation of Prana and Udanavayu takes place which moves upwards and gets filled up in the channels of throat and head. Due to increased pressure inside the channels Vayu expels out with a forceful forward bending of Urahpradesha and even feeling of eyeballs getting protruded out along with little pain. This creates a typical sound which is similar to the sound produced by a broken bronze vessel is called as Kasa. KharjuradiLeha in Kasa with not only suppressing Kasa but also provide nutrition during that period, so that the child is not deprive of nutrition. The another aspect of treatment that was the cost of the treatment also needed to be evaluated and not only just efficacy and acceptability and the palatability. So KharjuradiLeha which is easy to prepare and palatable of small children of selected from YogRatnakar to be dispensed and evaluate its acceptability and efficacy.

NIRUKTI

Kasa is the result in the release of obstructed Vayu producing abnormal sound in the process which may be productive or dry in nature.

CLASSIFICATION OF KASA

1. VatajKasa
2. PittajKasa
3. KaphajKasa
4. KshayajKasa
5. KhatajKasa

SAMANYA NIDANA

1. Samanyanidanas of Kasa as per various Acharyas can be classified as follows.
2. Aharajanidanas
3. Viharajanidanas

4. Manasikanidanas
5. Vyadhijanyanidanas

SAMANYA SAMPRAPTI OF KASA

According to AcharyaCharaka the Samanyasamprapti of Kasa is upward movement of vitiated adho- Vayu afflicting the channels present in the shira, Ura and Greevapradesha. Vitiating of both Prana&Udanavayu together blocking of Srotasas results in increased pressure inside the channels of the head causing painful contraction of muscles in the areas like mandibular joint and cervical region, gives rise to cough with the presence or absence of sputum called as Kasa.

AcharyaSusruta narrates the Samprapti of Kasa as, due to Nidanasevana vitiation of pranavayu takes place and this gets mixed with Udanavayu and further moves upwards and gets filled in the channels of kanta and shirapradesha. The Prakopa of these two Vayus increases pressure inside the Stotasas causing abnormal, forceful expulsion of Vayu creating a peculiar sound similar to that of sound produced by broken bronze vessel.

SAMANYA CHIKISTA

During treatment of Kasa first we have to treat the causative factor. Along with Doshaparakop the sthana of PranavahaSrotasvizKantha, Phuphusa should undergo treatment. The Kanthya medicines should be used to treat Kasa. For that Gandush, Dhumpan, and Avaleha should be used. According to Dosha involvement the medicine used for treatment should be changed.

AIMS AND OBJECTIVES

1. To study the efficacy of lehas in Kasa.
2. Study the probable modes of action of KharjuradiLeha.

METHODOLOGY

Proper planning is essential to get the best outcome from any scientific research. The present clinical study entitled "Evaluation of the efficacy of KharjuradiLeha on Kasasw to URTI in children was carried out with the following procedures.

INCLUSION CRITERIA

1. Patient with acute Upper Respiratory Tract Infection with history of not more than three days in that Kasa is major symptom

2. Preschool age patients i.e. 4 to 6 years.
3. Patients with weight between 10th to 90th percentiles for the specific age.

EXCLUSION CRITERIA

1. Patients not of preschool age group
2. Patients with chronic illness like Tuberculosis, Asthma, Bronchiectasis, different types of Pneumonias etc
3. Patients on any other medication.
4. Patients with Lower Respiratory Tract Infection.

METHOD OF STUDY

1. The patients of either gender between the age group of 4 to 6 years were selected for the study.
2. The selected patients were taken for study under a single group of 30 members.
3. Kharjuradi Leha in 4 years a dose of 5 masha(i.e. 3.5gm/day), 5 years 6 masha(i.e. 4.25gm/day), 6 years 7 masha(i.e. 5gm/day)

Four times (qid) per day with sufficient quantity of honey for 7 days were advised.

DIFFERENT PHASES OF THE STUDY

The current study was carried out through different systematically designed steps to get the unbiased results. The following steps were adapted to complete the study.

1. Preparation of Kharjuradileha
2. Preparation of case proforma
3. Conceptual study
4. Study design
5. Collection and analysis of data
6. Discussion and interpretation of findings
7. Conclusion of the study

ASSESSMENT CRITERIA

1. Assessment was made by observing the improvement in the clinical features based on gradation before and after treatment.
2. Assessment was made on the following schedule
 - a) Initial assessment before the commencement of treatment
 - b) 2nd assessment on 1st day

- c) 3rd assessment on 2nd day
- d) 4th assessment on 3rd day
- e) 5th assessment on 5th day
- f) 6th assessment on the last day of treatment on 7th day

3. Patients were assessed on the parameters like signs and symptoms told by the patients or relatives and examination done on Modified Visual Analog Scale.

OVERALL ASSESSMENT

- a. Absence of signs and symptoms – Cured
- b. Reduction in signs and symptoms – Improved
- c. No changes in signs and symptoms – Not Improved

PREPERATION OF KHARJURADI LEHA

KharjuradiLeha contains the following three ingredients in equal proportion.

- 1. KHARJUR – Botanical Name – Phoenix sylvestrisRoxb.
- 2. DRAKSHA- Botanical Name- Piper longum
- 3. PIPPALI- Botanical Name – Piper Longum
- 4. SITA – Caster sugar prepared from Saccharumofficinarum Linn
- 5. LAJA – Roasted flakes of Sativa Linn

These drugs are taken in equal quantity for the preparation of Kharjuradileha and administered along with Madhu (Honey). The prepared drug should be used within 30 to 45 days.

OBSERVATIONS AND DISCUSSION

The compound was prepared and dispensed in clean air tight container. Analysis was carried out of the drug at Indian Drugs Research Association & Laboratory. The compound is dark brown in colour, solid having a typical smell of dates, it is soft in touch like paste and contains moisture. It is sweet in taste.

The compound leaves behind a bit of pungent taste which irritates the tongue which is because of the presence of Pippali. It is easily accepted as a drug and is quite palatable because of its characteristic test mainly of dates and Pippali.

On analysis the pH of 10% of solution of compound was 5.96 which is an acidic pH which does not favor growth of organisms in upper GI tract. The total sugar percentage was

approximately 61% which is quite high. Sugar is known as soothing agent helping also expectoration and it might one reason make the compound effective in Kasa. The constituents drugs are all predominantly Pittashamak, Madhur in Rasa and Vipak and Sheeta in Veerya. Thus the formation as a whole madhur in Rasa and Vipak and Sheeta in Veerya. Thus helping in pacifying Pitta and Vata. Madhur rasa is constituted by Pruthvi and Jala Mahabhuta those totally opposite to constitution of Vatadosha. Thus this is a good combination not only pacifying vitiated vata but also giving it a normal path by changing the mahabhuta constituents during the diseased period and trying to establish normalcy.

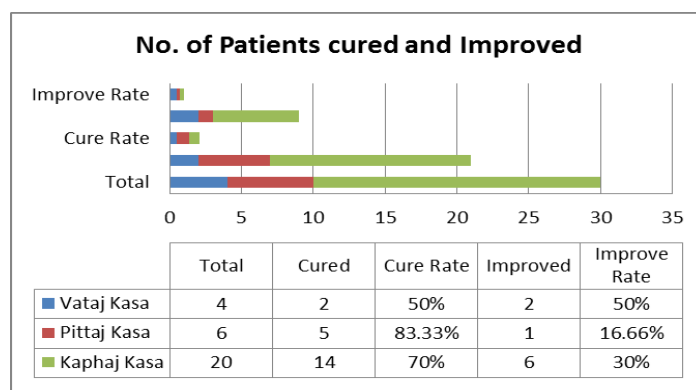
Kharjur, Laksha, Draksha and sharkara all are highly nutritive material containing Iron and free sugar, therefore these have high biological nutritive value except for Laja. Among these all are Guru and it would require a normal Agni or madhyamagni or Tikshna Agni to digest it and this function is carried out by pippali.

The data was obtained after administration of compound to the subjects and frequent monitoring of these of those, this data is tabulated and analyzed on statistical parameters to get concrete conclusions, the observation and the probable reasons. Those kinds of observations are discussed herefore.

GENERAL DISTRIBUTION OF THE STUDY GROUP

Thirty four children suffering from Different types of kasa were selected for the clinical trial, by considering the inclusion and exclusion criteria. These children were taken in a single group. Four children were not included in the study because of their discontinuation of the treatment in the middle. Thus the complete clinical trial was completed on thirty children diagnosed of kasa.

NO. OF PATIENTS CURED AND IMPROVED



Graph no.1.

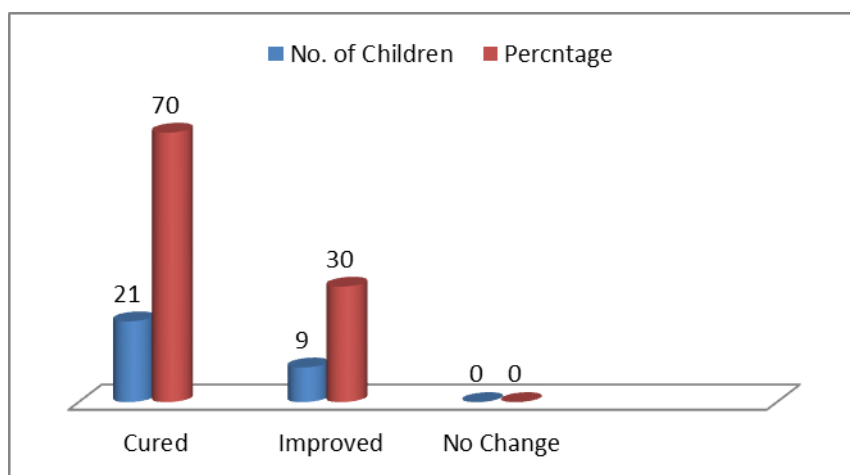
All the patients showed significant improvement and most of the time were cured of the disease while remanant here released of the symptoms of Kasa. A total of 70% of the subjects were cured thus proving that KharjuradiLeha plays in not only releasing the symptoms of Kasa but also in breaking ongoing Samprapti process, 70% of kaphajkasa patients were cured as compared to 83.33% of pittajkasa, Whereas only half of vatajkasa patients were cured. The rest were relieved of symptoms. No patients were dropped out as a result of unwanted effect of the medicine.

OVERALL IMPROVEMENT OF CHILDREN IN THE STUDY GROUP

Table no. 1.

Overall improvement	No. of Children	Percentage
Cured	21	70
Improved	09	30
No Change	00	00

By considering the overall results of the treatment, 21 children of the study group were fully cured and 09 children got improved.



Graph no. 2.

CONCLUSION

1. KharjuradiLeha has short shelf life of about 45 days and is effective when prepared freshly. It is sweet in taste due to high presence of sugar in natural form, dates, and also the aided and the honey during preparation of the drug.
2. The Leha has got soothing effect and demulcent activity due to the sugar content and in Agnideepan activity due to the presence of Pippali.
3. The combination of these drugs is collectively known as KharjuradiLeha. It is palatable due to its sweet taste and is acceptable even childhood age group as was observed.

4. The compound was found to be effective in all three types of DoshjKasa predominantly in pittajkasa followed by kaphajkasa and vatajkasa in further descending order. This is due to the collective shitaveerya of leha and the Panchbhoutic composition of the Leha which is dominant in Pruthvi and Aapmahabhuta.

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