**International Journal of Biology, Pharmacy
and Allied Sciences (IJBPAS)**
'A Bridge Between Laboratory and Reader'

www.ijbpas.com

THE EFFECT OF AVAPIDAKA NASYA AND PRADHAMANA NASYA WITH JEEMOOTAKA PHALA IN THE MANAGEMENT OF KAMALA

PARAPPAGAUDRA M¹, D PRIYADARSHINI², SAHU L³, IMLIKUMBA⁴

1: Associate Professor, Department of Panchakarma, Parul Institute of Ayurved, Parul University,
Vadodara

2: Assistant Professor, Department of Panchakarma, Government Ayurveda Medical College, Bangalore

3: Assistant Professor, Department of Panchakarma, Rajiv Lochan Ayurved Medical College,
Chhattisgarh

4: Medical Officer (Ayurveda), North Eastern Institute of Folk Medicine, Pasighat Arunachal Pradesh

*Corresponding Author: Parappagoudra M: E Mail: maresh.parappagoudra26812@paruluniversity.ac.in

Received 15th June 2021; Revised 10th July 2021; Accepted 24th Aug. 2021; Available online 25th Jan. 2022

<https://doi.org/10.31032/ijbpas/2022/11.1.2040>

ABSTRACT

The present clinical study was undertaken to evaluate the efficacy of Jeemootaka Phala Avapidaka and Pradahamana Nasya in Koshtashakashrita Kamala. The study was done on 30 patients diagnosed with Koshtashakashrita Kamala of either sex, between the age group of 16-70 years who were randomly selected. The patients were divided into 2 groups namely, Group-A and Group-B. Jeemootaka Phala Avapidaka Nasya was administered in Group A, while Jeemootaka Phala Pradahamana Nasya was given to Group B. The dosage of Nasya was- 1.5ml in each nostril in Group A, 60 mg in each nostril in Group B. The assessment was done before the day of initiation of treatment and at the end of treatment. Patients were followed up for 7 days after Nasya. Thus total study duration was of 15 days. Both Nasya showed significant improvement in Koshtashakashrita Kamala. Clinically efficacy of Group A was found superior to group B but statistically both groups showed same efficacy.

Keywords: Koshta Shakashrita Kamala, Avapidaka Nasya, Pradahamana Nasya, Jeemootaka Phala

INTRODUCTION

Ayurveda reserves various therapeutic measures in its treasury either in the form of purificatory (Samshodhana) or pacificatory (Samshamna) therapy. Systemic Purification of the body is considered to be the prime pre requisite for all kinds of preventive and curative procedures. Ayurveda laid down a great emphasis on the branch of Panchakarma in terms of a Purificatory therapy. Nasya is one among the important procedures of classical Panchakarma therapy. Nasais told as Shiro Dwara, which is the Uttamanga and considered as Moola of human body. Hence the drug administered through *Nasa Marga* act locally as well as systemically. The dose required is minimal. The metabolism of drug is not required through first passage, therefore the action of the drug is fast and effective.

Kamala explained in Ayurvedic text is a disease, therefore it cannot be correlated with jaundice as it is only a sign which means yellowishness. But it can be correlated with hepatitis of either cause viral or non viral (alcohol/drug induced), because the clinical symptoms of hepatitis are similar to those described under kamala in Ayurveda. The differentiation of hepatitis viral and non viral is not there in Ayurveda. But we get reference that disease can manifest from different

causes and cause may lead to many diseases.

Most common form of viral hepatitis is Hepatitis B, caused by Hepatitis B Virus. It infects more than 2 billion people worldwide, out of which 360 million people are chronic carrier annually. It is tenth leading cause of mortality. Whereas common cause of non viral is ethanol, found in alcoholic beverages. Alcoholic hepatitis occurs in patients with alcoholic liver disease and increase chances of cirrhosis. Western medicine, despite of its enormous success does not offer any promising cure for Hepatitis. So the cure of disease is left to the mercy of nature and time.

Ayurvedic literatures have wealth of resource information regarding the measures for treatment of kamala and preventing its complication. Among them Virechana and Nasya play a major role. As mentioned in Ayurvedic texts, Nasya of Jeemootaka, Dhamarghava etc. is practiced by many Ayurvedic and some folklore practitioners across India and have significant therapeutic effect also. The present study will help to develop some evidence regarding the same.

Objectives of the study:

1. To study and evaluate the efficacy of Jeemootaka Phala Avapidaka Nasyain Kostha Shakashrita Kamala.
2. To study and evaluate the efficacy of

Jeemootaka Phala Pradhamana Nasyain
Kostha Shakashrita Kamala.

3. To evaluate the comparative efficacy of
Jeemootaka Phala Avapidaka and
Pradhamana Nasyain Kostha Shakashrita
Kamala.

MATERIALS AND METHODS:-

Source of Data:

Patients attending the OPD and IPD of Shri Jayachamarajendra Institute of Indian Medicine Hospital, Bangalore were taken for this study. 30 patients who fulfill the inclusion criteria were randomly selected for the study.

Inclusion Criteria:

- Patients with classical signs and symptoms of Koshta Shakashrita Kamala.

- Patients with serum bilirubin range from 3 mg/dl and above.

- Nasyayogya.

Exclusion Criteria:

- Patients below the age of 16 and above 70 years of either sex.
- Patients associated with severe systemic illness.
- Hemolytic and Obstructive jaundice.
- Patients associated with hereditary and auto immune disorders.
- Nasyayogya.

Diagnostic Criteria:

Patients with classical signs & symptoms of Koshtashakasrita Kamala supplemented with that of increased level of serum bilirubin i.e. above 3 mg/dl were selected for the clinical study.

SUBJECTIVE PARAMETERS	OBJECTIVE PARAMETERS
Pectavarnata of Netra, Nakha, Twak, Anana, Mutra and Varchas	LFT's.
Avipaka, Dourbalya, Daha	Urine bile salts, bile pigments
Subjective and Objective parameters before and after treatment were analysed by using appropriate statistical methods and final conclusion was drawn.	

Study Design:

Present Study is a prospective open uncontrolled randomized clinical study as follows-30 patients were randomly selected and divided in two groups-A & B with 15 patients in each group. Patients were educated about procedure and informed consent was taken.

Group A:

Poorva Karma: Before Starting Nasya Deepana and Pachanawith Trikatuchurna 1gms before food with Anupana of Ushna Jala. On Each Day of Nasya Karma Sthanik Snehana with Murchita Tilataila and Swedana with Nadi Sweda on Jatrurdhwa Pradesh.

Pradhana karma: Avapidaka Nasyawith

Jeemootakaphala Churnamixed in cow's milk. 120mg Churnain 3ml of cow's milk.

Dose: 1.5ml in each nostril,

Time: Early morning empty stomach, 3 times with alternate day gap comprising 5 days.

Paschat karma: Gandusha with Ushna Jala, Rest, Laghu and Deepaniya Ahara

Group B: Poorva karma and Paschat karma same as group A.

Pradhana karma: Pradhamana Nasya instead of Avapidaka, with Jeemootaka Phala Churnain dose of 60 mg(1/2 ratti) in each nostril.

Follow up period: All patients were followed up for 7 days of completion of Nasya.

Total duration: 15 days.

Assessment of total effect:

- Marked improvement > 60%
- Moderate improvement 40-60%
- Mild improvement 20-40%
- No improvement < 20%

RESULTS

All the 30 subjects registered under both the groups completed the course of treatment. The effect of the therapy on different parameters was assessed after the complete course of active treatment. The results thus obtained before and after the treatment were analyzed statistically. The results were statistically interpreted based on subjective and objective parameters:

In the present study, Nasya has shown significant results both clinically and statistically. Peeta Netra, Nakha, Twak, Anana, Mutra and Varchas, Avipaka, Dourbalya and Daha were the subjective parameters taken up for present study. Results obtained were interpreted for within the group and between group changes. A significant improvement was seen after the treatment in both groups with Nasya in Koshtashakasrita kamala with P value of <0.001 in all parameters except Dourbalya where p value was <0.01 in both groups. There was no difference in self reported severity of all symptoms between groups though there was a decrease in severity of all symptoms following treatments in both the groups. Liver Function Tests and Urine bile salts and bile pigments were the objective parameters taken up for present study. Results obtained were interpreted for within the group and between group changes. A significant improvement was seen after the treatment in both groups with Nasya in Koshtashakasrita Kamala with p value of <0.001 in Total, Direct, Indirect bilirubin, Alkaline phosphatase, Urine BS and BP in both groups and with p value 0.016 in SGPT and p value of 0.030 in SGOT and p value of 0.008 in GGT in Group A and with p value 0.005 in SGPT and p value of 0.038 in

SGOT and p value of 0.005 in GGT in Group B. There was no difference in all objective parameters between groups though the treatment was statistically highly significant in both the groups. Overall results showed 43.33% of marked relief and moderate relief with 40% and 16.66% of mild relief. Thus both the Nasya i.e. Avapidaka and Pradhamana are highly effective in treating Koshtashakasritakamala.

DISCUSSION:

➤ Related to Disease:-

Nidana: Maximum number of subjects 60% were of Alcohol hepatitis, 33.33% subjects were of Idiopathic hepatitis and 6.66% were of Infective hepatitis.

Incidence of previous history of jaundice: 27(90%) patients included in this study gave no history of jaundice whereas only 3(10%) had past history of jaundice.

Distribution of symptoms in patients:

All patients had classical symptoms mentioned except Daha which was found in 18 patients.

➤ Related to Treatment-

Time of initiation of nasal discharge-

After giving Nasya the minimum time taken for initiation of nasal discharge was 50 minutes and maximum time taken was 2hrs. From this we can say that irritation caused by Jeemootaka causes nasal discharge after 50mins - 2hrs of time span.

Amount of nasal discharge on each administration:

After giving Nasya the minimum amount of nasal discharge collected was 60 ml and maximum amount was 170ml. Nasal discharge was found to be increase with posture i.e. neck flexed position may be due to gravitational effect. It was found that collected secretion contained bilirubin.

Symptoms during nasal discharge-

After giving Nasya all patients complained of mild to moderate throat pain but it got relieved after the discharge stopped and also warm water gargling was advised. Few patients complained of headache and tinnitus but it subsided without any active treatment.

Duration of nasal discharge-

After giving Nasya yellowish nasal discharge started on an average of 1-1 ½ hr and continued for minimum of 10 hrs and maximum of 21 hrs.

Discussion on probable mode of action:

Depending on the observations and results and also the literature reviewed the probable mode of action can be explained as follows-

Samprapti: Pitta Prakop due to Abhyantara / Bahyahetu → Dusti of Rakta & mamsadhatu leading → to Rakatavaha Srotodushti Yakrutmoola of → Rakatavahasrotas gets affected leading to pitta atipravriti and vimargagaman → Appearance of peetanetra, nakha, twak, anana, mutra, varchas, avipaka,

dourbalya Koshtasha kasrita kamala.

Pathogenesis: Etiology (Viral/non-viral) → Inflammation of hepatocytes → Appearance of symptoms → jaundice, poor appetite, fatigue Hepatitis.

Probable mode of action

Jeemootakanasya → Absorption of Jeemootaka through nasal mucosa → Causing local irritation due to which yellow nasal discharge starts containing bilirubin → After entering systemic circulation has an action on inflamed hepatocytes → Improving the condition.

Obtained Observations do not justify a simple explanation of the relief of jaundice by enhanced nasal excretion of bilirubin. There is a possibility that the active principles do get absorbed through nasal mucosa and have an action on the liver. Such a putative effect may tie up well with the experimental observations with *L. echinata* on jaundice in rats (Bapat and Chandra, 1968) and Hepatoprotective activity of *Luffa echinata* fruits (Ahmed B, Alam T, Khan SA, 2001). However, more detailed work with frequent administration of the plant extract and rigorous and prolonged follow-up must be undertaken to confirm these preliminary findings of a therapeutic promise of *L. echinata* in hepatitis.

CONCLUSION:

Nasya, Shodhana Roopi Chikitsahas been

dealt in detail as an important Panchakarma therapy to highlight its systemic effects. Both the Nasya forms showed same efficacy statistically but clinically Avapidaka Nasyahad shown better results. Statistically this study was found significant showing good results in subjective and objective parameters in both the groups. It can be said that after giving Jeemootaka Nasya yellowish nasal discharge starts after 1- 1 ½ hr which continues for average of 12 hrs and amount of discharge collected is 60-170 ml. In this study 13(43.33%) subjects got Marked relief, 12(40%) subjects got Moderate relief and 5 (16.66) got mild relief. It can be said Jeemootaka (*Luffa echinata*) Nasya is effective in management of Koshtashakasrita kamala and is well tolerated by patients.

Conflict of Interest: None declared.

Source of support: Nil.

REFERENCES:

- [1] Agnivesha, Charaka Samhita, Revised by Charaka and Dridhabala with Ayurveda Deepika commentary of Chakrapani Datta, 3rd ed. Bombay: Nirnaya Sagar Press; 1941.
- [2] Bhela. Bhela Samhita – Text with English translation, commentary & critical notes by Dr. K. H. Krishnamurthy, edited by Prof.

- Priyavrat Sharma, 1st ed. Varanasi: Chaukhambha Visvabharati; 2000.
- [3] Chakrapanidatta. Chakradatta – with Bhavarthasandipini Hindi commentary by Sri. Jagadishvaraprasad Tripathi, edited by Pt. Bramhashankara Mishra, 5th ed. Varanasi: Chowkhamba Sanskrit Series; 1983
- [4] Christopher Haslett, Edwin R Chilven,, John. A.A.Hunter, “Davidson’s principles and practice of medicine”, Churchill Living stone, An Imprint of Elsevier Science Ltd, 19th ed.2002.
- [5] Harita. Harita Samhita – with Hari Hindi Commentary, edited in Hindi by Hariprasad Tripathi, 1st ed. Varanasi: Chowkhambha Krishadas Academy, 2005.
- [6] Harsh Mohan, Text Book of Pathology, 5th Ed. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd.2005
- [7] Madhavakara. Madhava Nidana – with the commentary Madhukosha by Vijayarakshita and Srikanthadatta and with extracts from Atankadarpana by Vachaspati Vaidya, 6th ed. Varanasi: Chaukhambha Orientalia; 2001.
- [8] P.V.Sharma. History of Indian medicine, New Delhi: Indian National Science Academy; 1st reprint 1992.
- [9] Sharangadharacharya. Sharangadhara Samhita – with the commentaries Adhamalla’s Deepika and Kashirama’s Gudhartha Deepika, Varanasi: Krishnadas Academy; Reprint 2000.
- [10] Sushruta. Sushruta Samhita – with Nibandha Sangraha commentary of Sri. Dalhanacharya and Nyayacandrikapanjika of Sri. Gayadasa on Nidana Sthana, reprint 2004. Varanasi: Chowkamba Krishnadas Academy; 2004.
- [11] Vagbhata. Ashtanga Hridaya, with the commentaries of Sarvanga Sundaram of Arunadatta and Ayurveda Rasayana of Hemadri, reprint 2000. Varanasi: Krishnadas Academy; 2000.
- [12] VriddhaVagbhata. Ashtanga Samgraha – with the Shashilekha Sanskrit commentary by Indu, 1st ed. Varanasi: Chowkamba Sanskrit Series Office; 2006.
- [13] Vangasena. Vangasena Samhita – with hindi commentary from Dr. Rajiv Kumara Roy, edited by Dr. Rajiv Kumara Roy, 1st ed. Varanasi Prachya Prakashan; 2000.
- [14] Frederic H Martini, Fundamentals of Anatomy and Physiology. 4thed. New jersey: Prentice Hall. 1123pp

-
- [15] Ramji, R.H. Singh, Advances in Ayurvedic medicine Diseases of the Liver, Varanasi: Chowkambha Visvabharathi; 1stEd.2005 pp 214.
- [16] en.wikipedia.org/wiki/Alcoholic_liver_disease.
- [17] en.wikipedia.org/wiki/Hepatitis.
- [18] Hepatoprotective activity of *Luffa echinata*...[J Ethnopharmacol. 2001] - PubMed - NCBI
- [19] Bapat, S. K. and Chandra, V. (1968): The Effect of *Luffa echinata* (Roxb) on experimental jaundice in rats. *Ind. J. Physiol. Pharmacol.*, 12, 119-120