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A CLINICAL STUDY TO EVALUATE THE EFFICACY OF NAGARADI KASHAYAM IN THE MANAGEMENT OF DAIHIKA JWARA IN CHILDREN

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ABSTRACT

Jwara is the most important disease among the diverse ailments that are explained in Ayurvedic classics which need immediate care and cure otherwise lead to the complications. *jwara* is mentioned with signs as well as separate disease. It is said that each and every individual suffers from *jwara* at the time of birth and death¹. It is also believed that the doctor who is able to treat *jwara* can easily control any other disease because, all the modes of treatments are advisable to cure the condition in different stages. In the present era, *jwara* is the commonest symptom visited by the physicians routinely. It has caused more concern to all human beings irrespective of age, sex, caste, creed, social status etc. Children are more prone to *jwara* due to their immaturity of tissues. *Daihika* or *sharira jwara* is the type of *jwara* mentioned by Charaka² which is having *sharira Santapa* is the cardinal symptom

Increase of body temperature of fever is the most common feature in most of the diseases particularly in children if not controlled properly in time, worsens the disease condition. Hence, the control of temperature is must in the treatment of any disorder. Oral temperature above 99.5F or 37.5°C is considered as fever³.

Already many potent antipyretic formulations are available in modern medicine, but they are not devoid of complications like side effects, drug resistance etc. Ayurveda too has many formulations for *jwara*, but it is essential to carryout experimental studies of different formulations to find out a potent, safer, cost effective formulation, without any side effect that can be easily administered in children and assimilated by their body. *Nagaradi Kashayam* is mentioned in Vrinda Madhava *Jwaratisara Prakarana* and *Phalashruti* is given as *sarvaJwarahara Kwatha*⁴, hence an attempt is made to evaluate the efficacy of *Nagaradi Kashayam* in the management of *Daihika jwara* in children.

METHODS

30 patients were selected who were suffering from *Jwara* (oral temperature above 99.5 F). they were treated with *Nagaradi Kashayam* and doses were fixed as per age. Detailed observations were made before and after treatment. Statistical analysis was made and conclusion was drawn.

RESULT

Nagaradi Kashayam showed significant effect on the management of *Daihika Jwara*.

KEYWORDS

Jwara, Nagaradi Kashayam, Ayurveda

INTRODUCTION

Fever in children is one of the most common clinical symptom come across by pediatricians and other health care providers and also a frequent cause of parental concern. Many parents administer antipyretics even when there is minimal or no fever, because they are concerned that the child must maintain a “normal” temperature. Fever, however is not the primary illness but is a physiologic mechanism that has beneficial effects in fighting infection or situation. There is no evidence that fever itself worsens the course of an illness or that it causes long-term neurological complications. Thus, the primary goal of treating the febrile child should be to improve the child’s overall comfort rather than focus on the normalization of body temperature. When counseling the parents or caregivers of a febrile child, the general well-being of the child, the importance of monitoring activity, observing for signs of serious complications, encouraging appropriate fluid intake and the safest antipyretic should be emphasized⁵.

Jwara is the most important disease described in Ayurvedic classics. While enumerating *Vyadhi*, Acharya Hemadri has given first place to *jwara* and it is known by the title ‘*Hemadrau Jwaradi Rogoddesha*’⁶. Not only Hemadri but almost all ancient scholars have given prime importance to *jwara* and described it’s *snidana-panchaka* and *Chikitsa* in first among all the diseases in respective parts of classics. Charaka has explained its *pradhanatva*

with specific reasons as '*Deha-Indriya-Manastapi, Sarva-Roga-Agraja, Balavan, Daruna, Dushchikitsya, BahuUpadrava*' etc. Also it is present during the time of birth and death which proves ultimate importance of its existence.

Arunadatta has given *vyutpatti* of the term '*jwara*' as '*vyadhi* in which destruction of the life takes place' is known as *jwara*⁸. Though *jwara* is having number of types, by *adhistan bheda* it is classified under *Sharira and Manasa jwara* and by *gatee bheda* *Bahirvegee* and *Antarvegeejwara*⁹. In proposed study, to evaluate *Jwaraghna* property of *Nagaradi Kashayam*, importance is given to only *Sharirika jwara* which is having *sharira-ushmadhikya* is the cardinal symptom which we can assess easily by *sparshan pariksha*.

Children are more prone to *jwara Vyadhi* because of *Aparipakwa Dhatu, Grahabadha* as well as frequent *nidan-sevana*. In allied science, symptomatic relief that is bringing down the temperature as soon as possible is emphasized. Antipyretics proved as hepato-toxic when taken in high dose or after long term ingestion along with the adverse effects¹⁰.

As mentioned in *Madhav Nidan*, in *jwara aamavastha* we should not give medicine¹¹ because of *Jatharagni mandya*. As *Jatharagni* will not be in its *spraktit avastha*, it will be unable to digest medicine which can lead to increase in *aama* and *srotorodha*. *Sushruta* mentioned this *jwara aamavastha* for first seven days¹². *Langhana, swedana, kaalchikitsa* and *Tikta rasaprayoga* are mentioned as line of treatment in this seven days period¹³. *Charaka* mentioned to give this treatment chronologically¹⁴, but *Vagbhata* emphasized on '*yathavastha*' i.e. as per *avastha* we can select and start the treatment which is more suitable to treat a child with *jwara*¹⁵. As children are *brimhana arha*¹⁶ and *langhana anarha*, we cannot give complete *langhana* to the child as well a *kaal-chikitsa* i.e. cannot wait for 4-7 days to get *niraam avastha* for the treatment as they are *sukumaar* and *alpa bala*.

So, by above description it is very much clear that without waisting the time we should treat febrile child. For *jwaraChikitsa pitta prashamaka* medicines are indicated. Out of 6, 3 rasa are *pittaghna* – *Kashay, Tikta* and *Madhur*¹⁷. *Madhur rasa* is *Sheet, Guru, Aama-kaaraka, Agnimandyakara*¹⁸ and hence cannot indicated in *Jwara*. *Kashay rasa* though works as *pittaghna*, it is *Guru, Sheeta, Aamastambhaka, Srotoradhaka*¹⁹, so it is said to be *Nishiddhai*. i.e. contraindicated in *jwara*. *Tikta rasa dravya* are predominant in *Akaash* and *Vayumahabhoota*²⁰. Hence, they are *Laghu, Srotoshodhi, Aamapachaka, Agnivardhaka,*

*Ruchikara*²¹ in qualities and that is why indicated in *jwaraChikitsa*²². In this study, *Nagaradi Kashayam* contains *Shunthi, Ativisha, Musta, Kalamegha, Guduchi* and *Kutaja* which are *Tikta rasa dravyas* indicated in all types of *jwara*.

Kashyapa has given more importance for *Kashaya* among all the preparations in childhood practice. *Kashaya* or *Kwatha* causes scraping action in oral cavity and similarly, it does scraping of disease i.e. *roganamvaa api karshanaat*²³.

Charaka also has given importance to *Kwatha kalpana* in the treatment of *jwara* – “*paachanam shamaneeyam vaa Kashayam payayed bhishak*” here, *kashaya* indicates *kwathakalpana* and not *Kashaya rasa*²⁴. To explain this concept further he mentioned – “*yah kashayahkashasyat sa varjastarune jware*”. *Kwatha* which is having *Kashaya rasa* is contraindicated in *taruna-jwara*²⁵. i.e. for first seven days.

Though *Samprapti Vighatana* plays important role in *Vyadhi Chikitsa*, here, *Vyadhi viparitaChikitsa* too should be considered as children are delicate and different from adults in every sense. So, to find safe antipyretic drug, an effort has been made to study *Chikitsa* of *Dehaja-jwara* which contains only *sharira Santapa* as *Lakshana* with *Nagaradi Kashayam*.

OBJECTIVES OF THE STUDY

- To study the effect of *Nagaradi Kashayam* in *Dehaja Jwara*.
- Conceptual study of *Jwara Chikitsa* with *Kashaya Pana*.

METHODOLOGY

SOURCE OF DATA

A. Literary Source:-

All the classical literatures, scientific journals, website about the disease and drug will be reviewed and documented for the planned study.

B. Sample Source:-

30 children attending Kaumarabhritya O.P.D. of Padma Ayurvedic Hospital, Terdal-Karnataka. Within the age group of 2 years to 5 years are selected for the proposed study, irrespective of their sex, caste, religion and socioeconomic status.

C. Drug Source:-

For the preparation of trial drug, individual drug is collected from GMP certified pharmacy and made into yavakutachurna as per classical guidelines in SDMT's AMC pharmacy. Churna is given to the patient's attendant after calculating the dose and instructed about preparation and administration of the kashay.

Kashaya preparation -

As majority of drugs are Mridu in consistency, 4 parts of water is added into the yavakutachurna and boiled on mandagni till 1/4th reduction is achieved.

चतुर्गुणं मृदौ द्रव्ये कठिने अष्टगुणं तथा ।

अत्यंत कठिणे देहे बुधैः षोडशीकं जलम् ॥

-शा.म.

This is further filtered with the help of cloth or strainer and administered to the patient in warm condition.

COMPOSITION OF DRUG

Composition of Nagaradi Kashayam as mentioned in Vrindamadhava contains Shunthi, Ativisha, Musta, Kalamegha, Guduchi and Kutaja.

METHOD OF COLLECTION OF DATA

Patient fulfilling the inclusive criteria will be selected for the study.

A.

Study Design

Single clinical study

B. Sample Size

30 patients fulfilling diagnostic and inclusive criteria will be selected.

Conclusion Criteria

- Children suffering from Jwara in between the age group of 2 years to 5 years, irrespective of sex, religion, socioeconomic status and food habits.
- Children having Samanya Jwara Lakshana as mentioned in Madhava Nidana.
- Oral temperature above 99.5°F/37.5°C.

D. Exclusion Criteria

- Fever associated with systemic disorders and complications.
- Fever with vomiting as associated symptom.

E. Diagnostic Criteria

Samanya Jwara Lakshana mentioned by Madhava Nidana and Charaka Samhita along with oral temperature above 99.5°F/37.5°C.

F. Procedure of administration of drug

Nagaradi Kashaya is administered in dosage of 12 ml to 30 ml , according to age of the child as mentioned in Sharangadhar Samhita in 2 divided doses. Morning 9 AM and Evening 5 PM

Table No.59: Dose calculation as per age of the child

Age of the child	Calculation	Dose in mg	Dose in ml
2 years	2*4=8 masha	12,000 mg	12 ml
3 years	3*4=12 masha	18,000 mg	18 ml
4 years	4*4=16 masha	24,000 mg	24 ml
5 years	5*4=20 masha	30,000 mg	30 ml

G. Study Design

- 30 children with Jwara were selected for the clinical study according to inclusion and exclusion criteria.
- Written consent in the convenient language was obtained from the parents for participating in the study after explaining about course of the study in detail.
- Complete physical examination, detailed evaluation of children and documentation of findings in a special proforma was done.
- Trial drug was administered to the children.
- Assessment of children based on criteria was done on 1st, 3rd and 5th day.
- First Dose was given in hospital and for remaining 9 doses, Kwatha churna is given to patient's attendant along with a plastic measuring vessel and explained the method of preparation of Kwatha.
- Assessment was done for 3 days, exactly between 6 to 6.30 PM, that is one hour after administration of Dose with the help of Digital thermometer.
- Data was analyzed statistically.

H. Study Duration – 5 Days

I. Observation Period

Clinical response will be assessed on 1st, 3rd and 5th day.

J. Assessment Criteria

The assessment of the condition is done based on a detail proforma adopting standard methods of scoring of subjective and objective parameters statistically.

1. Subjective Parameters

Aruchi

Trishna

SarvangaGrahana / Angamarda

2. Objective Parameters

Santapa / Increase in body temperature

Presentation of Data

The data collected and compiled from this trial was sorted out and processed further by subjecting it to varied statistical method.

RESULTS

EFFECT OF THE THERAPY

In the present study of 30 patients of Jwara, all are treated with Nagaradi Kashayam as per their age. The results obtained in this clinical study are being described here. Data collected from patients before treatment, 1st, 3rd and 5th day of the treatment. Here, our aim is just to reduce the body temperature, and not the complete treatment of the Jwara vyadhi; hence, followup is not taken.

Assessment of the condition was done based on detailed proforma adopting standard scoring methods of subjective and objective parameters. As the assessment parameters include both, subjective and objective data, statistical analysis is done by using 't' test.

Effect of intervention i.e. Nagaradi Kashayam on Angamarda of 28 patients of Jwara

Table No.1: Effect of intervention on Angamarda

Day during the treatment	No.of patients with complete remission from the symptom		No.of patients with decreased symptom		No.of patients with increased symptom		No.of patients with unchanged symptom	
	No.	%	No.	%	No.	%	No.	%
1 st	4	14.2%	-	-	-	-	24	85.7%
3 rd	15	53.5%	-	-	-	-	13	46.4%
5 th	24	85.7%	-	-	-	-	4	14.2%

Effect of intervention i.e Nagaradi Kashayam on 26 patients of Aruchi**Table No.2: Effect of intervention on Aruchi**

Day of treatment	No. of patients with complete remission of the symptom		No. of patients with decreased symptom		No. of patients with increased symptom		No. of patients with unchanged symptom	
	No.	%	No.	%	No.	%	No.	%
1 st	4	15.3%	5	19.2%	-	-	17	65.3%
3 rd	19	73.07%	7	26.9%	-	-	-	-
5 th	24	92.3%	2	7.6%	-	-	-	-

Effect of intervention i.e. Nagaradi Kashayam on 10 patients of Trishna**Table No.3: Effect of intervention on Trishna**

Day of treatment	No. of patients with complete remission of the symptom		No. of patients with decreased symptom		No. of patients with increased symptom		No. of patients with unchanged symptom	
	No.	%	No.	%	No.	%	No.	%
1 st	2	20%	-	-	-	-	8	80%
3 rd	6	60%	4	40%	-	-	-	-
5 th	10	100%	-	-	-	-	-	-

Effect of intervention i.e. Nagaradi Kashayam on 30 patients of Jwara**Table No.4****Effect of intervention on Jwara**

Day of treatment	No. of patients with complete remission of the symptom		No. of patients with decreased symptom		No. of patients with increased symptom		No. of patients with unchanged symptom	
	No.	%	No.	%	No.	%	No.	%
1 st	14	46.6%	7	23.3%	2	6.6%	7	23.3%
3 rd	25	83.3%	3	10%	-	-	2	6.6%
5 th	26	86.6%	1	3.3%	-	-	3	10%

Table No 5: Comparitive Differences

Paired Samples Statistics					
		Me an	N	Std.Deviatio n	Std.Error Mean
Pair1	BT	0.93	30	0.254	0.046
	DAY5	0.17	30	0.379	0.069
Pair2	BT_A	0.47	30	0.730	0.133
	DAY5_A	0.00	30	0.000	0.000
Pair3	BT_B	1.80	30	0.961	0.176
	DAY5_B	0.07	30	0.254	0.046
Pair4	BT_C	1.33	30	0.547	0.100
	DAY5_C	0.13	30	0.346	0.063

Table No.6

Paired Samples Correlations				
		N	Correl ation	Sig.
Pair1	BT &DAY5	30	-0.239	0.203
Pair2	BT_A &DAY5_A	30	0	0
Pair3	BT_B & DAY5_B	30	0.339	0.067
Pair4	BT_C &DAY5_C	30	0.487	0.006

Table No.7

Paired Samples Test									
		Paired Differences					t	df	Sig.(2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	BT-DAY5	0.767	0.504	0.092	0.578	0.955	8.332	29	0.000
Pair 2	BT_A-DAY5_A	0.467	0.730	0.133	0.194	0.739	3.500	29	0.002
Pair 3	BT_B-DAY5_B	1.733	0.907	0.166	1.395	2.072	10.465	29	0.000
Pair 4	BT_C-DAY5_C	1.200	0.484	0.088	1.019	1.381	13.573	29	0.000

From above it is proved that our treatment mode is statistically significant.

DISCUSSION

DISCUSSION ON JWARA AND IT'S NIDANA IN PAEDIATRIC AGE GROUP

In Ayurveda, Jwara is not merely the concept of raised body temperature, but as it is said in Charaka Samhita, 'Deha-Indriya_ManahSantap' is the cardinal symptom of Jwara. This can be defined as the state where the Body, Mind as well as Sense organs suffer due to the high temperature. It can be better understood as the disease which can occur at any time through out the life, right from the birth till the death, as it is observed in practice.

This vyadhi-shreshtha is such a huge topic of discussion that one may need to spend better part of one's lifetime to understand Jwara n fullest of details. It will be difficult to assess indriya and manah Santapa, particularly in the age group of 2-5 years, that is why in this study, I have taken only 'Daihika Jwara' or 'Shareera Santapa' as targeted symptom rather than focusing on whole Jwara vyadhi Chikitsa.

During the screening of the patients, it was very clear that, due to atmospheric changes (sudden changes in weather as well as due to travelling history) most of the patients got Jwara, in which Samprapti was acute in origin. Some patients suffered due to improper food intake which leads to Aamotpatti. In such cases, though disease was in acute condition, Samprapti might be chronic. Few patients suffered from Jwara just couple of hours after the intake of cold items, which is very common nidana in paediatric age group.

DISCUSSION ON CLINICAL STUDY

In the present study, a total of 30 patients suffering from Jwara between age group of 2 to 5 years were taken from OPD of Padma Ayurved Hospital, Terdal, irrespective of sex, caste and economical status.

Clinical Observations :

Age: In present study maximum number of patients belongs to the age group of 4-5 years i.e. 60% and remaining from 2-3 years i.e. 40%. Prevalence of Jwara was more seen in 4-5 years. It may be due to geographical variation in immune status of the children.

Sex: in present study, maximum i.e.60% patients were female and remaining 40% were male. In fact, females have a stronger CMI and antibody response than male (Epidemiology of Malaria; pp 41; Malaria second ed. ; BI publication, New Dehli) but, here female children are more affected may be due to geographical variation in the population distribution as well as the area where study is carried out, by observation I can claim that health and nutrition of a female child is under estimated than a male child as the geographical area is still developoid on the diamention of proper education and literasy.

Religion: In the present study, maximum number of patients i.e.76.6% were Hindus, 16.6% were Muslims and 6.6% were Jains. This may be due to geographic predominance of Hindu in this area.

Socio-economic Status: In the present study, maximum number of patients (80%) were from middle class followed by 10% from upper class and 10% from lower class family. As Terdal is a small town surrounded by small villages, maximum residents are of middle class.

Habitat: Among 30 patients, maximum number of patients (86.6%) were from rural area and rest of 13.3% from urban area, this may be due to improper drainage, accumulation of water; irrigation etc. is common in rural area. This gives suitable environment for growth of micro-organism responsible for infections. In rural area hygienic condition is not maintained properly, that is why people here are more prone for infections.

Dietary habits: In the present study, maximum number of patients i.e. 73.3% were of mixed diet and 26.6% patients were purely vegetarian. Though mixed diet pattern population is more in present study, it does not prove the relation of mixed diet and Jwara.

DISCUSSION ON INTERVENTION

The research intervention, i.e. Nagaradi Kashay is administered to the patients selected after screening with the help of eligibility criteria. Dose was fixed according to the age of the patient.

First dose is given to the patient on the same day of enrollment. Kwatha is prepared and administered to the patient at hospital itself and for rest 9 doses Kwatha churna is measured, packed in 9 different packages and handed over to the patient's attendant along with the instructions for Kwatha preparation. Every time freshly prepared Kwatha is advised and recommended to administer to the patient and as per followup during rest 2 visits, the instructions are followed by almost all the care takers / parents. To measure the quantity of Kwatha, a plastic measuring vessel is provided along with Kwatha churna and for the patients belonging to age group 2-3 years it was instructed to administer the Kashaya with the help of palady.

Oral temperature was note down on 1st, 3rd and 5th day of intervention at 7 pm (during evening OPD time) i.e. 2 hours after the evening dose administration with the help of digital thermometer. Patients were instructed, not to have anything 30 minutes before measuring the oral temperature.

DISCUSSION ON EFFECT OF THERAPY

Effect on Temperature: After the intervention of Nagaradi kashay, on 5th day, there were 26 patients (86.6%) out of 30 achieved normal temperature, one patient was having

decrease in the temperature after 5 days of intervention but did not achieved the normal renj. So, from 27 (90%) patients have shown the significant result i.e. reduction in body temperature. Rest 3 (10%) patients were also having reduction in body temperature for fist 3 days but On 5th day there was no reduction in temperature than 3rd day noted reading.

Effect on Trishna: Out of 10 patients which were having Trishna as one of the laxana in Dehaja Jwara, on 5th day of intervention all 10 patients were having complete remission from the Trishna. So, Nagaradi kashay has shown significant effect on it.

Effect on Aruchi: Out of 26 patients of Aruchi, at the end of the treatment, 24 (92.3%) patients got complete remission from Aruchi as well as 2 (7.6%) patients though they did not achieved complete cure, there was reduction in the severity of the Aruchi. Hence, Nagaradi Kashayam has significant effect on Aruchi in Jwara.

Effect on Angamarda: Out of 30, 28 patients of Jwara were having Angamarda Lakshana in Pradhanavedana. At the end of treatment i.e. on 5th day, 24(85.7%) patients got complete relief from Angamarda. 4 patients were having reduction in severity of angamarda for first 3 days but on 5th day there were no changes in severity of the symptom and mild Angamarda was present.

DISCUSSION ON MODE OF ACTION OF THE INGREDIENTS OF NAGARADI KASHAYAM

Research intervention, Nagaradi Kashayam contains 6 drugs i.e. Nagar, Ativisha, Musta, Bhunimba, Amrita and Vatsaka. Let us now discuss what exactly each of these components works for Shareera Santapa prashamana.

- 1. Shunthi / Nagar:** Shunthi is having Tikshnaguna, Ushnaveerya, yet Madhur vipaka. Therefore, it does not produce Daha in spite of doing Aamapachana and Dipana. Therefore, it is a medicine that is used in day to day practice to treat jwara in young children as well as adults.

Shunthi is having Jwaraghna tapakrama as well as it'ssatmikarana is srotorodhnivarak due to Tikshnaguna. Therefore, it acts on rasavaha and swedavaha Srotas and helps in dissolution of Jwara. At the same time Ushnaveerya helps in Rasagatasaama Dosha pachana and does Dhatvagni Vardhana. Thus helping in Samprapti Vighatana.

2. Ativisha: Jwara is Abhyantaramarga vyadhi. Ativisha does pachana of koshthasthitaAamadosha, as well as works as Pachana, Dipana and Srotorodha Nivaraka Dravya. In children, Ativisha-vipakwajala is the best medicine in Ajirna, Aamadosha and Jwara.

Ativisha is also Katupaushtik in nature.Hence useful in Daurbalya due to Jwara.

3. Musta: Musta is the best among all Dipana, Pachana Drugs. Internal application of Musta is always beneficial in all types of Jwara. It does Aamapachana due to Tikta, Katuguna and Katuvipaka. Thus, it is used as Jwaraghna.

Musta is Trishnanashaka and Balya, thus, treats Trishna and Angamarda which gets manifest during coarse of Jwara.

4. Bhoonimba / Kalmegh: Kalmegh is famous for its Swedajanana karma along with Dipana and Pachana. It works on Swedavaha Srotas and reduces shareerasthaushma by swedajanana. Also it is Katupaushtik in nature, thus, helps in the treatment of Udarka after Jwara Chikitsa.

5. Guduchi: Guduchi is one of the VichitraPratyayarabdha dravyas. Guduchi should have been Katuvipaka as it is having Tikta and Katu rasa pradhanya, but Guduchi is Madhur viaki Dravya. It does Aamapachana due to Tikta Katu rasa, also carries out Agnivardhana. It reduces Tikshnaguna of pitta due to Madhuravipaka and Mriduguna. Hence, proved as Jwaraghna. Along with this, Guduchi is Rasayana and balya. So, very much beneficial in children for Jwara Chikitsa.

6. Vatsaka / Kutaja: Kutaja is Jwaraghna due to its Tikta guna and KatuVipaka.

DISCUSSION ON KASHAYA KALPANA IN JWARA CHIKITSA

Kashyapa has given more importance to Kashaya among all the preparations in childhood practice. Charaka also has given importance to Kwatha kalpana in the treatment of Jwara. Here, discussing some benefits of Kashaya kalpana for Jwara Chikitsa in children over the Swarasa and Kalka kalpana.

- As the panchavidha Kashaya kalpana are uttarottarlaghu in nature, kawatha is laghugunapradhana than that of Swarasa and Kalka kalpana. As the process itself consist of prolonged use of Agni, the Kwatha are usually of Laghu and Dipana attributes i.e. Kashaya are easily digested and they stimulate Jatharagni.

In case of Jwara, Jatharagni mandya is the main reason behind the Samprapti formation. So in such condition, the remedy which can get easily digested and can does Pachana and Dipana is only Kwatha kalpana due to Agni samskara done on it.

- Kwatha kalpana is more stable than Swarasa and Kalka kalpana. This is achieved due to heat used during processing. Kwatha once prepared can remain stable upto 4 to 5 huors at least (though its saveeryatavadhi is 24 hours). Hence we can use freshly prepared as well as within 24 hours if we can manage it to remain atleast in lukewarm condition.

CONCLUSION

The present research work entitled “A clinical Study To Evaluate The Efficacy Of Nagaradi Kashayam In The Management Of Daihika Jwara In Children” was aimed to assess Shareerasantapahara or Daihika Jwarahara effect of the Nagaradi kashay. The sample size of the study is 30. The objectives were ‘To study Jwara in children, To study the effect of Nagaradi Kashayam in Dehaja Jwara and Conceptual study of Jwara Chikitsa with Kashaya Pana.

The following conclusions can be drawn from this study:

- Jwara is first among the disease explained in Ayurveda classics which needs immediate care and cure otherwise it may lead to the complication.
- Daihika Jwara is a type of Jwara mentioned by Charaka which may arise due to simple causative factors, mild, moderate or can be severe in nature as per degree of temperature and Dosha involvement. In some condition single Dosha and in some conditionsbahudoshavastha can be seen, but, easily curable if gets diagnosed in pooravarupa or nava avastha, without leading to any complication.
- Nagaradi kashay is mentioned in Vrinda Madhav Jwaratisara Chikitsa and adviced in any type of Jwara. Though it is not specifically mentioned medicine for balajwara,

the drug is effective in bringing down the temperature as well as for JwarodbhavTrishna, Angamarda and Aruchi as the drug is not only contains Dipana, Pachana property but also Balya and Trishnanashakaguna.

- Adverse effects were not observed during this study.
- Based on the quantitative and qualitative analysis of subjective and objective parameters of the above mentioned study, it is concluded that the Nagaradi Kashay is having significant effect in Dehaja Jwara Chikitsa. Hence, with this conclusion, null hypothesis is rejected and alternative hypothesis is accepted.

FURTHER SCOPE FOR THE STUDY

- The present study was carried out in small scale further study can be carried out with large sample size which may provide further information regarding action of Nagaradi Kashay.
- As mentioned in Vrinda Madhava, Nagaradi Kashaya is not only working on Jwara, but also its action is mentioned on Atisara as most of the drugs are having grahi, koshtagata vata shamana property. So with same intervention Atisara Chikitsa or combine Chikitsa for Jwaratisara can be studied.
- If the Kashaya has to administer more than two times in 24 hours to the patients it can be inconvenient to prepare the Kashaya again again, so bottled or stable Kashaya has to prepare either by mixing sugar, mixing glycerine or by fermentation method without decreasing its potency. This can be the scope for further study.

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