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## A CLINICAL STUDY ON AMRATAKADI CHURNA WITH KUTAJ TVAK CHURNA IN THE MANAGEMENT OF BALATISARA

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### ABSTRACT

Diarrhoea is the major Health problem in paediatrics population. The traditional text of Ayurveda described various treatment options for the management of Atisara. Ama and Vata are the major factors in aetiopathogenesis of Atisara. According to Ayurveda Deepana and Pachana medicines are required to break the samprapti of Atisara. In addition to above Grahi dravyas are also indicated to maintain the consistency of stool. So it is important to search for more safe, easily available with cost effective therapy, as these having less or negligible adverse effect on child health. In the present study, clinical trial to access the efficacy of Amratadi churna has been conducted in the management of Balatisara. Amratadi churna is mentioned in Bhaishajya Ratnavali, contents of Amratadi churna is Amratak, Amra, and Jambu. Churna kalpana is economical and easy to prepare. It is easily palatable and easy to administered in the children. Churna kalpana has Laghu, Deepana and Pachana properties. So it would help in Agnideepana, Doshapachana and it helps to break the Samprapti of Atisara. So Amratadi churna used in this study.

**KEYWORDS :-** Atisara , Amratadi churna , Diarrhoea , Churna kalpana, child health

## Introduction

Child is a pride of our nation. They are building blocks of growth and development of our nation. We have to pay attention towards the child from conception, birth to development to Adolescent, which is also main aim of Kaumarbhritya branch of Ayurveda.

A child suffers with various types of diseases in all types of Awastha. Balyaawastha is up to the age of 16 years and it is further divided in three stages- Kshirad Awastha, Kshiraanad Awastha and Annad. Balyaawastha is more delicate as they have Alpa-bala, Alpa-satva and Aniyata- agni, so it is too difficult to treat them. They are not able to explain their trouble properly and all the phases of their growth and development are easily affected by avourable and unfavourable condition like Mithya Aharavihara, use of contaminated complimentary foods, use of contaminated or polluted water, improper feeding habit, poor sanitation, poor malnutrition status of children.

Atisara means Ati – excessive, Sara– passing of liquid matter through Guda. Atisara in Balaawastha or childhood diarrhoea is termed as Balatisara. It is one of the commonest and serious diseases during childhood and is the major health problem in developing countries. According to Ayurveda due to consumption of Virudha Ahara or wrong food habits which are responsible for Aama-utppati which further leads to Vata vrudhhi because of malfunctioning of Samana-apanavata leading to Jatharagnimandya and shunyata of Koshtha. (malabsorption in large intestine ) it causes the increase in Dravata of mala in Pakvashaya and result

in Atisara, so Aama and Vatadosha are the major factors in aetiopathogenesis of Atisara.

Diarrhoea is defined as recent change in consistency and frequency of stool, i. e. Liquid or watery stools that occur three or more than three times a day. Diarrhoea is disease of intestinal imbalance; involves water and electrolyte imbalances, malnutrition and under-nutrition. Diarrhoea not only affects health of children but also considered responsible for child mortality especially in tropical and sub- tropical countries. So it is need of time to develop proper and safe treatment modalities from ayurvedic science for such conditions like Balatisara (childhood Diarrhoea).

## AIM & OBJECTIVES

Aim:-

To Randomized Controlled Trial To Assess The Efficacy Of Amratakadi Churna With Kutaj Tvak Churna In The Management Of Balatisara

Objectives:-

To compare the efficacy of Amratakadi churna with kutaj tvak churna.

To assess side effects of Amratakadi churna if any.

To assess side effects of kutaj tvak churna if any.

## MATERIAL AND METHODS

Patients with the clinical features of Balatisara were selected after screening with inclusion and exclusion criteria from OPD and IPD of kaumarbhritya department of our Ayurveda Rugnalaya. Ethics approval: Study was commenced after institutional ethics committee (IEC) clearance.

## Criteria for selection of cases

### Inclusion criteria

- 1.Children of age group between 3 - 6 years patients will be taken.
- 2.Irrespective of sex, religion, socio-economic status and food habits.
- 3.Children having udara sool in association with two or more episodes of stool.
4. Patients with sign & symptoms of atiasara.
5. Patients with mild moderate degree of dehydration.

### Exclusion Criteria-

1. Children below the age of 3 years and above 6 years.
2. Patient with severe dehydration.
3. Nematodes infestation with complication such as HIV, HBs Ag positive immune compromised patients.
4. Patients with bloody stool and vomiting.
5. Any other systemic diseases which interfere with treatment.

### Withdrawal Criteria:-

The patients would be withdrawn from the trial if there was,

1. Occurance of serious adverse events.
2. The investigation felt that the protocol had been violated when patients will become un-co-operative.
3. The patients will not willing to continue the trial to follow the assessment schedule.

### Assessment parameters:

#### Subjective criteria:-

- 1) Mala samhana. (Consistency of stool)
- 2) Udarshool. (Pain in abdomen)
- 3) Malvega
- 4) Dietry intake With Frequency Of Stool with frequency of stool

#### Objective criteria-

- 1) Degree of Dehydration.

#### Study design:

#### Type of study: Open randomized control trial.

80 diagnosed patients from patients attending the OPD of Kaumarbhritya Department of our institute between 3 to 6 years of age irrespective of caste, religion, sex, socioeconomic status were randomly

selected and devided into two groups.

- Group A : ( 40 patients ) – Trial Group.
- Group B : ( 40 patients ) – Control Group

## Management of Patients

	Group A	Group B
No. of patient	40	40
Treatment	Amratakadi churna	Kutaj tvak churna
Dose	3gm - 6gm	3gm – 6gm
Kaal	Pragbhakta	Pragbhakta
Anupan	Madhu	Koshna jala
Route	Oral	Oral
Duration	3, 7, 14 Days	3, 7, 14 Days
Rehydration Therapy	ORS according to W.H.O	ORS according to W.H.O

### ASSESSMENT CRITERIA OF WORK:-

Improving in the patients were assessed mainly on the basis of

- 1) Mala samhana. (Consistency of stool)

- 2) Udarshool. (Pain in abdomen)
- 3) Malavega (Frequency of stool per day).
- 4) Dietary intake With Frequency Of Stool with frequency of stool Degree of Dehydration

### GRADATION OF SYMPTOMS

SYMPTOMS	GRADE 1	GRADE 2	GRADE 3
Malasamhana (Consistency)	Prakrut	Alpadrava / Alpabaddha	Drava
Udarshool (Pain in abdomen)	No pain	4 – 6 episode per day	7 – 9 episode per day
Malvega (Frequency of stool)	< 3 motion per day	4 –6 loose motion per day	7 – 9 loose motion per day

Dietry intake With Frequency Of Stool with frequency of stool	Normal	Eating food with less desire	Eating timely without desire
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As per W.H.O. criteria, the gradation of Dehydration are follows:

	Grade	Description
1	Mild	Increase of 4 stools per day over baseline
2	Moderate	Increase of 4 to 6 stools per day over baseline
3	Severe	Increase of 7 or more stools per day over baseline
4	Life-threatening	Life-threatening consequences
5	Death	Death

**INVESTIGATION:-**

Stool routine and microscopic examination (If Necessaery)

**OVERALL ASSESSMENT CRITERIA:-**

Detailed clinical observations was done on follow up assessment of results. The final had divided in four groups.

Significantly improvement	>75% relief Symptoms
Marked improvement	50-75% relief Symptoms
Improvement	25-50% relief Symptoms
Insignificantly improvement	<25% relief Symptoms

**OBSERVATIONS AND RESULT****1.Age wise distribution**

Sr. No.	Age Group in years	No of Patients			Percentage(%)		
		Group A	Group B	Total	Group A	Group B	Total
1	3 – 4	3	5	8	7.5	12.5	20
2	5 – 6	37	35	72	63.33	66.67	80
<b>Total</b>		<b>40</b>	<b>40</b>	<b>80</b>	<b>100</b>	<b>100</b>	<b>100</b>

**2.Gender wise distribution**

Sr.No	Gender	No. of patients Group (A)			Percentage %		
		Group (A)	Group (B)	Total	Group (A)	Group (B)	Total
1	Female	23	24	47	57.5	60	58.75
2	Male	17	16	33	42.5	40	41.25
<b>Total</b>		<b>40</b>	<b>40</b>	<b>80</b>	<b>100</b>	<b>100</b>	<b>100</b>

**3.Economical wise distribution**

Sr. No.	Economy	No of Patients			Percentage(%)		
		Group A	Group B	Total	Group A	Group B	Total
1	Low Income	21	18	39	52.50	45.00	48.75
2	Middle Income	12	12	24	30.00	30.00	30.00
3	High income	07	10	17	17.50	25.00	21.25
<b>Total</b>		<b>40</b>	<b>40</b>	<b>80</b>	<b>100</b>	<b>100</b>	<b>100</b>

**4.Immunization wise Distribution**

Immunization	No of Patients			Percentage (%)		
	Group A	Group B	Total	Group A	Group B	Total

<b>Iregular</b>	09	14	23	22.50	35.00	28.75
<b>Regular</b>	31	26	57	77.50	65.00	71.25
<b>Total</b>	<b>40</b>	<b>40</b>	<b>80</b>	<b>100</b>	<b>100</b>	<b>100</b>

### Effect of therapy according to relief in Symptoms' score

Relieved score and %relief in Symptoms' score in Group A

Sr. No	Symptoms (Group A)	B.T.	A.T.	Relieved	% elief
1	Mala Samhana	101	34	67	66.34
2	Udarshool	108	35	73	67.59
3	Malvega	104	32	72	69.23
4	Dietry intake With Frequency Of Stool with Frequency Of Stool	105	30	75	71.43
5	Degree Of Dehydration	98	33	65	66.33

### Relieved score and %relief in Symptoms' score in Group B

Sr. No.	Symptoms (Group B)	B.T.	A.T	Relieved	% Relief
1	Mala Samhana	105	39	66	62.86
2	Udarshool	113	45	68	60.18
3	Malvega	95	41	54	58.84
4	Dietry intake With Frequency Of Stool With Frequency Of Stool	110	53	57	51.82
5	Degree Of Dehydration	91	41	50	54.95

### Total Effect of therapy

Shows effect of therapy according to relief in Symptoms score of group A

Sr.No	Improvement	Symptoms	No. of Symptoms
1.	<b>Good Improvement</b> (75% - 100%)	-----	00
2.	<b>Moderate Improvement</b> (50% - 75%)	Mala Samhana , Udarshool, Malvega, Dietary intake With Frequency Of Stool ,Degree Of Dehydration	5
3.	<b>Mild Improvement</b> (25% - 50%)	-----	00
4.	<b>Unchanged</b> (No Improvement) (0% - 25%)	-----	00

By using Amratakadi Churna on Balatisar symptom as Mala Samhana, Udarshool, Malvega, Dietary intake With Frequency Of Stool, were got the 50% to 75 % relief. As for Mala Samhana symptom in Study group shown the 66.64 % relief followed by 67.59 % for Udarshool, 69.23 % for

Malvega, 71.43 % for Dietary intake With Frequency Of Stool, 66.33% for Degree Of Dehydration symptom of all 40 patients of Balatisar. Therefore, they were grouped into moderate improvement

**Shows effect of therapy according to relief in Symptoms score of group B**

Sr. No.	Improvement	Symptoms	No. of Sympto ms
1.	<b>Good Improvement</b> (75% - 100%)	-----	00



2.	<b>Moderate Improvement</b> (50% - 75%)	Udarshool, Malvega, Dietry intake With Frequency Of Stool, Mala Samhana, Degree Of Dehydration	5
3.	<b>Mild Improvement</b> (25% - 50%)	----	00
4.	<b>Unchanged</b> (No Improvement) (0% - 25%)	----	00

evidence of complication.

By using Kutaj Twak on Balatisar symptoms as Mala Samhana, Udarshool, Malvega, Dietry intake With Frequency Of Stool, Degree Of Dehydration were got the 50% to 75 % relief. By using Kutaj Twak on Balatisar.

As for Mala Samhana symptom in Study group shown the 62.86% relief followed by 60.18 % for Udarshool, 58.84 % for Malvega, 51.82 % for Dietry intake With Frequency Of Stool, 54.95% for Degree Of Dehydration symptom of all 40 patients of Balatisar.

Therefore, they were grouped into moderate improvement

## CONCLUSION

After treatment we can conclude that Amratakadi Churna can be used as one of the drug of choice for better relief in symptoms. Balatisar is one grievous problem in the world because of which patient is always in trouble. From the above study it has concluded that **Amratakadi Churna** improves quality of life as an effective drug for manage symptoms of Balatisara no apparent

## REFERENCES

- 1.Ashtang Hridayam, Kaviraj Atridev Gupta, Chaukhamba Prakashan ,Varanasi,Reprint 2011, Uttartantra 2<sup>nd</sup> Adhyaya Balampratishedham, Page no. 620
- 2.Charak Samhita, Dr. Yadavji Trikamji, Chaukhamba Sansthan Var anasi, 2006, chikitsasthana,Chapter 19, Page no. 668-698.
- 3.Sushrut Samhita, Ambikadutta Shasti, Chaukhamba Sanskrit San sthan, seventeenth edition 2003, Uttarsthana-Chapter 40, Page no. 210-242.
- 4.Kashyap Samhita, Pandit Hemraj Sharma, Chaukhamba Sanskrit Sansthan Varanasi, Reprint 2006 Sutrasthan, Adhyaya 25/13, Page no.34.
- 5.Sharangadhara Samhita, Dr. Shaileja Shrivastav, Chaukhamba Prakashan Delhi, 2<sup>nd</sup> Edition 1998, Purvakhanda, Adhyaya 7/8, page no. 132.
- 6.Yogratnakara by Vd. Lakshmipati Shastri, Chaukhambha Prakashan, Varanasi 2009, Uttarardha, Balarogadhikara, Page no. 254.

7.Essential of Pediatric OP Ghai, 8<sup>th</sup> edition, page no.293.

8.Nelson text book of Pediatric, Page No.1613-1617.

