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## RESEARCH ARTICLE

### A CLINICAL STUDY OF HINGVADI CHURNA ON KASHTARTAVA W.S.R TO PRIMARY DYSMENORRHOEA

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#### ABSTRACT

Dysmenorrhoea is defined as painful menstruation so as to incapacitate day to day activities. A systematic review of studies in developing countries performed by Harlow and Campbell has revealed that about 25-50% of adult women and about 75% of adolescents experience pain during menstruation. It is a randomized clinical trial with 15 patients fulfilling the inclusion criteria were selected for the trial. The duration of treatment was from 7th day due date of menstrual cycle to next menstrual cycle for 60 days. The assessment was done after each cycle on 5th day of cycle and follow-up for the next menstrual cycle. The test of significance showed that the efficacy of "Hingvadi churna" is highly significant in Kashtartava.

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#### INTRODUCTION

Dysmenorrhoea is the most common gynaecological problem faced by women during their adolescence which causes significant discomfort and anxiety for the woman as well as family. Dysmenorrhoea itself is not life threatening, but is found to have a profound impact on the daily activities and may result in missing work or school, inability to participate in sports or other activities. Thereby, it may accentuate the emotional distress brought on by the pain (Rao, 2008). Not less than 50% of women are said to experience some discomfort in relation to menstruation, and 5-10% of girls in their late teens and early twenties are incapacitated for several hours each month. Estimates vary widely because of difference in the criteria of dysmenorrhoea and because most investigations concern only one section of the community. The incidence of dysmenorrhoea is affected by social status, occupation and age, so groups of school girls, college students, factory workers, and women members of armed forces each provide different statistics (Andrew, 1999). In *Ayurveda* dysmenorrhoea is not described as a separate disease entity. It can be because women were not suffering much from this problem those days because of pin pointed *Ritucharya* and *Rajasvalacharya*.

Though word *Kashtartava* is not separately described as a disease in *Ayurvedic* classics there are many other diseases in which *Kashtartava* is considered and is described as a symptom. Hence, this study is particular about the description regarding *Kashtartava* on the basis of scattered classical references (Agnivesha, 2007).

#### Aims and Objectives

- To study aetiopathogenesis of *Kashtartava* and to explore the clinical consequences.
- To evaluate the effect of *Hingvadi Churna* in Primary Dysmenorrhoea.

#### MATERIAL AND METHODS

**Design of the Study:** The method adopted in present study is Randomized, Clinical, Open study.

**Selection of Cases:** Total 15 clinically diagnosed and confirmed cases of Primary Dysmenorrhoea were registered from the O.P.D. / I.P.D. N.I.A. Hospital, Jaipur.

**Inclusion Criteria:** Participants coming with chief complaint of *Kashtartava* with scanty or average amount of menses,

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Participants in age group of 14 to 30 years, Participants suffering with *Kashtartava* for more than 2 consecutive cycles.

**Exclusion Criteria:** Participants suffering from secondary dysmenorrhoea, STIs, systemic diseases, Participants having organic pathology of uterus and adnexa e.g. Fibroid uterus, carcinoma of endometrium etc, Participants having Dysfunctional Uterine Bleeding, Participants with H/O Thyroid dysfunction.

**Investigations:** Laboratory investigations were carried out before treatment to rule out any other pathological conditions:

**Haematological:** CBC, HIV, HbsAg, VDRL, Random blood sugar, Monteux test (if needed), Thyroid profile (if needed).

**Urine:** Routine and microscopic examination.

**Sonography (U.S.G.):** For uterine and adnexal study (if needed) to rule out any pathology or lesion.

### Posology

DRUG	<i>Hingvadi Churna</i>
DOSE	3gm twice a day with lukewarm water
ROUTE	Oral
DURATION	For two consecutive menstrual cycle/60 days

**Duration for clinical trial:** The trial will be carried out for 60days in two consecutive menstrual cycles.

**Follow up study:** Case will be followed during trial fortnightly for 2 consecutive menstrual cycles. Clinical assessment will be done after completion of third consecutive menstrual cycles.

### Criteria of assessment

**Assessment of Pain (Dysmenorrhoea):** A special **Scoring Pattern** was applied in symptoms:

1. PAIN INTENSITY:	Grade
Absent	0
Mild (pain do not interfere with daily activity)	1
Moderate (daily activity hampers, relieves with analgesics)	2
Severe (do not relieved by analgesics)	3

2. URATION:	Grade
Absent	0
Pain for one day (for few hours)	1
Pain for one day(for whole day)	2
Pain for >or=2 days	3

3.NATURE OF PAIN	Grade
Absent	0
Occasional	1
Dull	2
Spasmodic	3

4.MENSTRUAL FLOW DURATION	Grade
1 day	0
< or =2 days	1
3-4 days	2
> or =5 days	3

5.MENSTRUAL FLOW AMOUNT	Grade
Scanty(spotting)	0
Average(1-2 pads)	1
Normal(3-4 pads)	2
Excessive(5 pads or more)	3

### 6. VISUAL ANALOG SCALE<sup>[3]</sup>—

1	2	3	4	5	6	7	8	9	10
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Worst pain Imaginable And further it is assessed as follows-

7 - 10	severe pain	Grade 0
6 - 4	moderate pain	Grade 1
1 - 3	mild pain	Grade 2
0	no pain	Grade 3

### 7. Associated complaints— total 10 complaints

7 -10	grade 0
4 - 6	grade 1
1 - 3	grade 2
0	grade 3

### Rating scale for the assessment of improvement in the symptoms after therapy -Percentage of Relief Effect

No relief	0%	relief in the signs and symptoms
Mild relief	(1 to ≤25%)	relief in the signs and symptoms
Moderate Relief	(>25 to ≤50%)	relief in the signs and symptoms
Significant relief	(>50 to ≤75%)	relief in the signs and symptoms
Excellent Relief	(>75%)	relief in the signs and symptoms

**Statistical Evaluation of results:** Further the effect of the treatment of signs and symptoms were analyzed statistically by Mean, SD, and SE, 'paired Wilcoxon signed rank test 'and' unpaired Mann-Whitney test for non-parametric study.

## OBSERVATIONS AND RESULTS

Highly significant results are shown on Pain Intensity, Pain Duration, Nature of Pain, Associated symptoms and VAS Scale. Results on Flow Duration and amount of flow were not significant.

Highly significant results are shown on Nausea, Fatigue, Breast tenderness and Giddiness. Significant results obtained on Sweat, Headache and Constipation. Results on Fainting, Vaginal discharge, Vomiting and Diarrhoea were Non-significant.

### Average Percentage of relief

The symptomatic improvement was found that Average percentage of relief was 63.05%.

## DISCUSSION

**Mode of action of Hingvadi Churna:** Drugs of *Hingvadi Churna* have predominantly *Tikta, Katu, Kashaya And Amla Rasa*. *Tikta Rasa* has *Agni Vardhaka, Ruchya* and *Mukha Shodhaka* properties, so it increases appetite and improves digestion. *Kashaya Rasa* has the property of *Asravishodhana (Raktadushtihara)*. *Amla Rasa* of *Matulung*, has properties like *Agnideeptikrut, Pachana* and *Rochana* which improves digestion, increases appetite. Its *Hridya* property reduces nausea and vomiting. *Amla Rasa* also has the property of *Muda Vata Anulomana (Mudam- Ananulomagam, Vata Mutra Purishaanaam Anulomanam.) Katu Rasa, Usna Virya* and *Katu Vipaka* of *Yavakshar* increases appetite and improves digestion which brings about *Srotoshodhana*.

**Table 1. Shows the pattern of clinical recovery in various ‘Subjective Parameters’ of *Kashtartava* in 15 patients treated with “*Hingvadi Churna*” orally – by Wilcoxon-ranks test matched-pairs signed-ranks test**

S No	Symptoms	Mean		Dif.	% of Relief	SD	SE	P	Results
		BT	AT						
1.	Pain Intensity	2.40	3.40	1.00	83.33%	0.654	0.169	<0.0001	H.S.
2.	Pain Duration	2.33	0.40	1.93	82.85%	0.798	0.206	<0.0001	H.S.
3.	Nature of Pain	2.53	0.73	1.80	71.06%	0.676	0.174	<0.0001	H.S.
4.	Flow Duration	1.60	1.73	-0.13	8.33%	0.639	0.165	> 0.05	N.S.
5.	Flow Amount	1.46	1.53	-0.06	4.54%	0.593	0.153	> 0.05	N.S.
6.	Associatd Symptoms	2.06	0.53	1.53	74.16%	0.639	0.165	<0.0001	H.S.
7.	VAS Scale	2.60	0.60	2.00	76.92%	0.925	0.239	<0.0001	H.S.

**Table 2. Shows the pattern of clinical recovery in various ‘Associated Symptoms’ of *Kashtartava* in 15 patients treated with “*Hingvadi Churna*” orally – by Wilcoxon matched-pairs signed-ranks test**

S.No	Symptoms	Mean		Dif.	% of Relief	SD	SE	P	Results
		BT	AT						
1.	Nausea	0.80	0.13	0.66	83.33%	0.48	0.12	<0.001	H.S.
2.	Vomiting	0.40	0.13	0.26	66.67%	0.45	0.11	> 0.05	N.S.
3.	Fatigue	0.86	0.13	0.73	84.60%	0.45	0.11	<0.001	H.S.
4.	Headache	0.60	0.20	0.40	66.66%	0.50	0.13	< 0.05	S.
5.	Fainting	0.26	0.13	0.13	49.98%	0.35	0.09	> 0.05	N.S.
6.	Sweat	0.53	0.13	0.40	75.00%	0.50	0.13	< 0.05	S.
7.	Diarrhoea	0.20	0.06	0.13	66.65%	0.35	0.090	> 0.05	N.S.
8.	Constipation	0.80	0.33	0.46	58.33%	0.51	0.13	< 0.05	S.
9.	Vaginal Discharge	0.13	0.06	0.06	50.01%	0.25	0.06	> 0.05	N.S.
10.	Breast Tenderness	0.80	0.20	0.60	75.00%	0.50	0.13	< 0.001	H.S.
11.	Giddiness	0.80	0.13	0.67	83.33%	0.48	0.12	< 0.001	H.S.

**Table 3. Shows the % improvement of symptoms**

S.NO.	CARDINAL SYMPTOMS	RESULT IN PERCENTAGE
1	Nausea	83.33%
2	Vomiting	66.67%
3	Fatigue	84.60%
4	Headache	66.66%
5	Fainting	49.98%
6	Sweat	75.00%
7	Diarrhoea	66.65%
8	Constipation	58.33%
9	Vaginal Discharge	50.01%
10	Breast Tenderness	75.00%
11	Giddiness	83.33%
12	Pain Intensity	83.33%
13	Pain Duration	82.85%
14	Nature of Pain	71.06%
15	Flow Duration	08.33%
16	Flow Amount	04.54%
17	Associated Symptoms	74.16%
18	VAS Scale	76.92%
	Average % of relief	63.05%

**Table 4. Overall effect of therapy**

S.No.	Effect of therapy	Result		
		No.	%	
1	Mild	(0 to 25%)	00	0.00%
2	Moderate	(>25 to 50%)	01	06.66%
3	Significant	(>50 to 75%)	11	73.33%
4	Excellent	(>75%)	03	20.00%

*Laghu* and *Ruksha* gunas of the drugs of pacify *Kapha* vitiation if any. *Sara*, *Ushna*, *Tikshna* and *Sookshma* properties of the drugs in the formulation remove *Avarana* (*Kapha*) and thus allow normal movement of *Apana Vata*. *Hingvadi Churna* mostly contains drugs having *Ushna Virya* which pacifies vitiated *Vata*. Most of the drugs in the yoga have *Katu Madhura Vipaka* which also pacifies vitiated *Vata*. *Vata Anulomana*, *Shulahara*, *Shothahara*, *Srotovishodhana*

properties of drugs of *Hingvadi churna* facilitates normal flow of *Vata* i.e. *Anuloma Gati* of *Apanavata*. The symptomatic improvement was found that overall relief was i.e. 03(20.00%) patients having excellent relief, 11(73.33%) patients showed significant relief, 01(6.66%) patient showed moderate relief. So the effect of therapy was highly significant. It is may be due to the Ingredients of “*Hingvadi churna*” are mainly *katu-tikt Rasa*, *Ushna Virya* and having *Sukshma*, *Snigdha* and *Vikasi Guna* which are the properties of *Vatanulomana*

(facilitator of downward movement of *Vata*), *Shoola prashamana* (colic pain reliever) and *Vedanasthapana*. The drug *Hingvadi Churna* provided relief in all the cardinal features of *Kashtartava*. All 15 patients showed improvement in symptoms of *Kashtartava* as most of the parameters were statistically significant. Improvement in associated symptoms of diarrhea was statistically insignificant. Presence of associated symptoms like nausea, vomiting, faintness, diarrhea etc. indicate the involvement of other *Dosha*'s also in *Kashtartava*.

### Conclusion

Therapeutic Effect of "*Hingvadi churna*" orally showed relief by improvement in 83.33% in pain intensity, 82.85% in pain duration, 71.06% in nature of pain, 8.33% in menstrual flow duration, 4.54% in menstrual flow amount, 74.16% in associated symptoms and 76.92% in VAS scale.

The symptomatic improvement was found that Average percentage of relief was 63.05%.

### REFERENCES

- Agnivesha, Charaka, Drdhabala, Chakrapani Dutta, Acharya J.T. Charaka Samhita with Ayurveda Dipika Commentary. 1st ed. Varanasi. Chaukhambha Prakashan; 2009.
- Agnivesha; 'Charaka Samhita' Vaidya Yadavji Trikamji Acharya, Reprint:2007 Published by Chaukhambha Orientalia, Varanasi.
- Andrew A. 1999 Primary Dysmenorrhoea, American Family Physician, Vol. 06/no.02, (Retrieved on 08/07/2009).
- Rao, K.A. 2008, Textbook of Gynaecology, Elsevier, a division of Reed Elsevier India Pvt. Limited, India. pp37

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