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"COMPARATIVE STUDY OF SHUNTHYADI CHURNA & LATAKARANJ CHURNA IN THE MANAGEMENT OF AAMATISARA"

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ABSTRACT

Background and Objective: To study the efficacy of Shunthyadi Churna on Aaamatisara with control Group of Latakaranj Churna. Method: Single blind controlled randomized study. 50 patients were selected for the study and divided into Two Group randomly. Group A was given 500mg. Shunthyadi Churna internaly twice a day 8am & 8pm. Group B was given 500mg. Latakaranj Churna internaly twice a day 8am & 8pm. Duration of treatment: 7 days with follow up on 1st, 3rd, 5th & 7th Day. This study was carried out in BVDU College of Ayurveda & Hospital attached to Bharati Medical Foundation in Year 2016 and 2017. Result: Comparing all the symptoms of Aamatisara before & after treatment; Group A is slightly effective than Group B. Statistical Analysis: The Statistical Analysis result Group A is slightly effective than Group B. Conclusion: As per statistical analysis Group

A which was treated with Shunthyadi Churna shows significantly better results when compared with Group B which was treated with Latakaranj Churna. P- Value for all 6 symptoms is smaller than 0.05.

INTRODUCTION

Atisara (Diahorrhea) mainly deals with Agni (Apettite). Agnimandya (loss of appetite) is main hetu of atisara (Diahorrhea) although Krimi, Atyambupana (excess water intake) are hetus of atisara (Diahorrhea). Atisara (Diahorrhea) - Grahani- Arsha (piles) is interrelated

vyadhies. If atisara (Diahorrhea) is not properly treated then it leads to Grahani and then Arsha (piles).

Aamatisara may be defined as a disease characterized by ati dravamala pravruti (watery stool) related to Annavaha and Purishvaha strotas produce by the disturbance in Udakvaha strotas. The loss of fluids through Aamatisara can cause dehydration. The Ingested food when associated with readily occurring morbid products of Aamajirna (indigestion) which leads to dosha dhatu samurchana (mixing) in koshtha (stomach) irritating the GIT which is excreted being mixed with stool of various colour and discharge with pain.

There are so many formulation of Aamatisara explain by our Aacharyas out of which Shunthyadi churna (Shunthi, Ativisha, Hingu, Indrayav, Chitrak) and Latakaranj churna (Latakaranj) mention by "Sharangdhar Samhita" & "BhavPrakash" respectively were taken for this trial. These were easily available, in daily use, very cheap & palatable also affordable, without side effects and which was well tolerated by all age groups.

NEED FOR STUDY

Atisar (Diahorrhea) constitute a major cause of morbidity and mortality worldwide, especially in developing countries like India. This extremely frequent digestive aliment can occur at any age, location and with people of any social condition. As per Ayurveda diagnosis and treatment is mentioned according to avastha of Atisar (Diahorrhea) i.e. Aamatisar and Pakvatisar. (The side effect of Modern Anti diarrhea are Dizziness, drowsiness, tiredness, or constipation may occur. In severe condition patient having Nausea, Vomiting, Stomach / Abdominal pain, uncomfortable fullness of the stomach/abdomen, fast / irregular heartbeat, severe dizziness, fainting, Aamatisara is seen most commonly in today's era due to change in life style and unhealthy food eating habits.

So an effort has been taken to compare Shunthyadi Churna (Sharangdhar Samhita, 2/68) & Latakaranj Churna (Vyas P. S., 2000/ Nagpur Shri Ayu. Collage) as a Comparative drug in the management of Aamatisara.

AIMS AND OBJECTIVES

AIM –To study the effect of Shunthyadi Churna (Ref. - Sh. Sam. Khand 2 6/8) and Latakaranj Churna (Ref. - Bhav Pra.) In the management of Aamatisar.

OBJECTIVES

- 1. To study the effect of Shunthyadi Churna in Aamatisar in detail.
- 2. To study the effect of Latakaranj Churna in Aamatisar in detail.
- 3. To compare Shunthyadi Churna with Latakaranj Churna.
- 4. Observation of side effect if any.

Hypothesis -There is significant difference between effect of Shunthyadi Churna and Latakaranj Churna in the management of Aamatisara.

Null Hypothesis - There is no significant difference between effect of Shunthyadi Churna and Latakaranj Churna in the management of Aamatisara.

MATERIAL AND METHOD

Referances of Shunthyadi Churna & Latakaranj Churna as a treatment for Aamatisara are mentioned in following Ayurvedic Texts.

Ingridients of Shunthyadi Churna

No	DRUG	LATIN NAME	FAMILY	PART USED	QUANTITY
1	SHUNTHI	ZingiberOfficinale	Zingiberaceae	Rhizome	1 part
2	ATIVISHA	Aconitum Hetrophyllum	Ranunculaceae	Root	1 part
3	HINGU	Ferula Narthex	Umbelliferae	Latex	1 part
4	NAGARMOTHA	CyperusScariosus	Cyperaceae	Rhizome	1 part
5	INDRAYAV	HollarrhenaAntidysenterica	Apocyanaceae	Seed	1 part
6	CHITRAK	PlumbagoZeylanica	Plumbaginaceae	Root	1 part

Ingridients of Latakaranj Churna

NO	DRUGS	LATINE NAME	FAMILY	PART USED	QUALITY
1	Latakaranj	Caesalpinia Crista	Leguminosae	Seed	1 part

Rasapanchak

Rubupunchun					
DRUG	RASA	VIRYA	VIPAK	GUNA	KARMA
SHUNTHI	KATU	USHNA	MADHUR	SNIGDHALAGHU	GRAHI, PACHAN
ATIVISHA	KATU, TIKTA	USHNA	KATU	LAGHU, RUKSHA	DIPAN, PACHAN
HINGU	KATU	USHNA	LAGHU, SNIGDHA	KATU	PACHAN, DEEPAN
NAGARMOTHA	KATU, TIKTA, KASHAY	SHITA	KATU	LAGHU, RUKSHA	DEEPAN, PACHAN, GRAHI
INDRAYAV	TIKTA, KASHAY	SHITA	KATU	LAGHU, RUKSHA	DEEPAN, STAMBHAN
CHITRAK	KATU	USHNA	KATU	LAGHU, RUKSHA, TIKSHNA	DEEPAN, PACHAN
LATAKARANJ	KATU, TIKTA, KASHAY	USHNA	KATU	LAGHU, RUKSHA	DEEPAN, GRAHI

METHODOLOGY

- Clinical randomised Control Study.
- Patients were observed before and after treatment.
- Alternate method were used for selecting the patients in Group A & B.

Place of Work

The clinical trial was carried out at OPD and IPD of Bharati Vidyapeeth University Ayurved Hospital, Dhankawadi, Pune-43. Drugs were collected from pune local market. Standerdisation was done at Late principle B. V. Bhide Foundation. Authentification of drugs was done at Botany Department, Pune University.

Sample size

50 patients were selected for study, Thes sample size is desided according to prevalence of disease. The study divided into 2 groups, i.e. 25 patients each group.

METHOD OF PREPRATION

All the above mentioned ingredients of Shunthyadi Churna and Latakaranj Churna taken in equal quantity separately and fine churna are prepared. Then each churna is passed through sieve no 85. Then the churnas are mixed together according to ingredients of Shunthyadi Churna and Latakaranj Churna respectively. Separate pouch of 14gm are prepared and kepts in air tight container and labelled accordingly.

DOSE AND SCHEDULED

GROUPS	A	В
NO.OF PATIENTS	25	25
DRUG	SHUNTHYADI CHURNA	LATAKARANJ CHURNA
DOSE	500mg (Vyanodana Kala)	500mg (Vyanodana Kala)
ROUTE OF ADMINISTRATION	Oral	Oral
VEHICLE	Koshnajala (warm water)	Koshnajala (warm water)
TREATMENT PERIOD	7 Days	7 Days
FOLLOW UP	Follow up was taken from 1 st , 3 rd , 5 th & 7 th day	Follow up was taken from 1 st , 3 rd , 5 th & 7 th day

SELECTION OF PATIENTS

Inclusion Criteria

- > Patients age 18 to 70 yrs.
- ➤ Patients having Sign & Symptoms of Aamatisara described in Samhitas.

EXCLUSION CRITERIA

- Patient below age 18yrs & above 70yrs.
- Pakvatisara, Food Poisoning & Patient on Anti-Cancer therapy drug.
- > Presence of blood in stool.
- > Pregnancy.

OBJECTIVE CRITERIA

1) Jalanimjjan Test (Before & After),

Praman- Prakrut- 7 anjali,

Swaru- Drudha, Shushka, Appak,

Gandh- Durgandhi (Jirna Mala, Aamavstha.)

2) Following test done as per Requirment

CBC, STOOL EXAMINATION, Sr. ELECTROLYTES

SUBJECTIVE CRITERIA

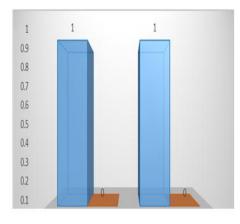
Clinical record Aamatisara will be done in following manner; Vegas (frequency) in 24 hrs, Udarshool (abdominal pain), Katishool (back pain), Dravata (Consistency of Stool), Degree of Dehydration, Trushna (thirst), Varna (colour), Gandha (smell).

According To Visual Analogue Scale (Vas)

- SEVERITY INDEX: 0-NORMAL (0), 1-MILD (1-3), 2-MODERATE (4-6), 3-SEVERE (7-10).
- NO. OF VEGA IN 24 HRS: 0= 1-2 Vega, 1= 3-5 Vega, 2= 6-8 Vega, 3= 9 & above Vega.
- THIRST: 0= Normal, 1= Just thirsty (Desire for water in 1 1/2hrs), 2= Moderate (Desire for water in 30 mins), 3= Excessive (Desire for water in 15 mins).
- CONSISTENCY OF STOOL: 0= Normal, 1= Semi solid, 2= Drava mala, 3= Ati Drava mala (Watery).
- DEGREE OF DEHYDRATION: 0= No Dehydration (Normal), 1= Perceptible, 2= Moderate

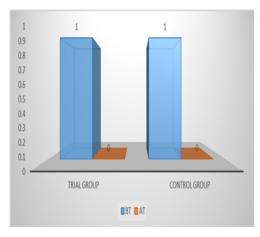
OBSERAVATIONS

NO. OF DRAVAMALA PRAVRUTI



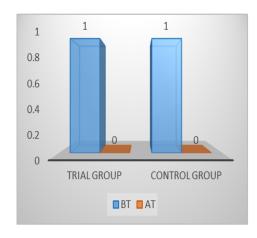
 Since observations are on ordinal scale, we have used Wilcoxon Signed Rank test to test the efficacy in Trial Group and Control Group. From above table we can observe that P-Values for Trial group and Control Group are less than 0.05 hence we conclude that effect observed in both

UDARSHULA



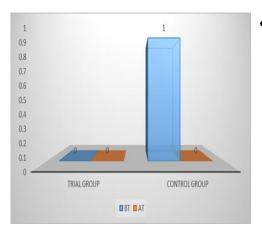
 Since observations are on ordinal scale, we have used Wilcoxon Signed Rank test to test the efficacy in Trial Group and Control Group. From above table we can observe that P-Values for Trial group and Control Group are less than 0.05 hence we conclude that effect observed in both groups are significant. But trial group is slightly better than control group.

DRAVATA



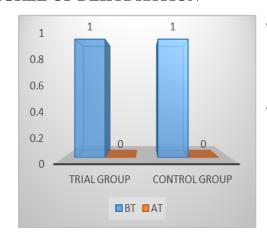
Since observations are on ordinal scale, we have used Wilcoxon Signed Rank test to test the efficacy in Trial Group and Control Group. From above table we can observe that P-Values for Trial group and Control Group are less than 0.05 hence we conclude that effect observed in both groups are significant. But trial group is slightly better than control group.

TRUSHNA



Since observations are on ordinal scale, we have used Wilcoxon Signed Rank test to test the efficacy in Trial Group and Control Group. From above table we can observe that P-Values for Trial group and Control Group are less than 0.05 hence we conclude that effect observed in both groups are significant. But trial group is slightly better than control group.

DEGREE OF DEHYDRATION



- Since observations are on ordinal scale, we have used Wilcoxon Signed Rank test to test the efficacy in Trial Group and Control Group. From above table we can observe that P-Values for Trial group and Control Group are less than 0.05 hence we conclude that effect observed in both groups are significant. But trial group is slightly better than control group.
- For comparison between trial group and control group we have used Mann Whitney U test. From above table we can observe that P-Value for Dravamal pravruti is less than 0.05 Trial Group is more effective. For all other symptoms P-Value is greater than 0.05 hence we conclude that there is no significant difference between Trial Group and Control Group.

JALNIMAJJAN TEST



There is trial group is slightly better than control group.

DISSCUSION

All cases of Atisara (Diahorrhea) weather due to indigestion of any unhygine food or drinks or weather with sypmtoms of Pravahika (dysentery) etc. all of them are marked by the symptoms of the any specific doshas involve in it.

There are so many formula medicines as per samhita to treat Aamatisara, Shunthyadi Churna and Latakaranj Churna were chosen on the basis of its easily availability. These both drugs have many advantages. Latakaranj Churna is having only Deepan & Grahi Properties. But Shunthyadi Churna containing of 6 having Deepan, Pachan, Grahi and Stambhan properties. So additional Pachan & Stambhan properties of Shunthyadi Churna gives better results as compare to Latakaranj Churna. The ingredient of both drug are uncontroversial. They are cheap, easily available throughout year. They are not toxic even on prolonged use.

In the present study, it has been observed that oral administration of Shunthyadi Churna and Latakaranj Churna showed its beneficial effects within 3-4 days & 4-6 days respectively. From this observation, it appears that Shunthyadi Churna and Latakaranj Churna are very effective. These drug are having properties to correct Agni, does Aamapachan, balancing Doshas and strengthen Annavaha Strotas.

Mode of action of drugs

Probable mode of action of drugs was DEEPAN, PACHAN and GRAHI as cumulative properties of most of drugs as follows: RASA- KATU, TIKTA, KASHAYA. VIPAK- KATU VIRYA- USHNA and SHEET

- 1) Drug reduces frequencies by soothing, cooling, anti-inflammatory action over hyper motility of intestine. The excessive stimulation of gastro-intestinal tract is reduced in clinical observation. In present study both churna has shown the reduction of frequencies.
- 2) Quantity of stool has been reduced to its normal physiological amount. Characteristic stool formation was seen after 3-4 days (Shunthyadi Churna) and 4-5 days (Latakaranj Churna) in most of patients, which is indirect indication of decrease in peristalsis & restoration of normal absorption through Pakwashaya. This may be due to Deepan, Pachan and Grahi and Stambhan properties of both drugs.
- 3) Many times after cure of disease, Agnimandya (loss of appetite) & Aruchi present in patients, but in this study it has been observed that complete cure of Agnimandya & Aruchi where patients were desired for food within 2-3 days.

- 4) Due to Atisara (Diahorrhea), intestinal tract becomes hypertonic or atonic and accumulation of gases leads to Upadrava like Adhman, Atopa where after administering these drugs & their DEEPAN, PACHAN, GRAHI action all symptoms were relieved.
- 5) Finally Restoration of Agni was corrected.
- 6) Atisara Mukti Lakshanas were observed after treatment in all patients.
- -This clinical study was limited with a small number of patients; but even then it has shown distinctively its anti diarrhoel effect. While carrying out this study, both drugs had not shown any toxic or side effects. It was well tolerated. Therefore it can be safely use as a drug of choice in the management of Atisara.

COMPARISON OF DRUGS

In Group A patients treated with SHUNTHYADI CHURNA significant relief was observed in symptoms- effect on Drava mala Vega (frequency), Udarashoola (abdominal pain), Aruchi, Trushna (thirst), Antrakujan, Parikartika, Kati-Uru-Jangha Shoola and Avastha of Atisara (Diahorrhea) In Group B patients treated with LATAKARANJ CHURNA significant relief was observed in symptoms- Udarshoola, Jwara and Atisara. Equally Effective in symptoms of Stool, Sweda (sweat), Angasad (body ache), Tandra (stupor), Nidra (sleep), Gaurav (heaviness), Utklesha, Shosha.

RESULT

In assessing overall effect of the therapy it was seen that- On the basis of observation it was seen that Group A (Shunthyadi Churna) was effective than Group B (Latakaranj Churna) respectively. P- Value of all two groups were less than 0.05 hence effective observed in all two groups were significant.

CONCLUSION

The comparative study of Shunthyadi Churna and Latakaranj Churna was carried out and concluded that-

- 1. Shunthyadi Churna shows better results in Aamatisara.
- 2. Latakaranj Churna shows better results in Aamatisara.
- 3. In assessing overall effect of therapy Shunthyadi Churna is slightly better than Latakaranj Churna in the management of Aamatisar. Shunthyadi Churna is more effective on Dravamala Pravruti (watery stool), Dravata (consistency) and Deegri of Dehydration as compare to Latakaranj Churna.

- 4. Both Shunthyadi Churna & Latakaranj Churna are equaly effective in Trushna (thirst), Katishula (back pain) & Udarshula (abdominal pain)
- 5. In detail Aamatisara vyadhi has been studied from different samhitas & detail study of Shunthyadi Churna & Latakaranj Churna was carried out.
- 6. Both Shunthyadi Churna and Latakaranj Churna shows no any side effect durieng clinical trial.

BIBLIOGRAPHY

- 1. Apte V. S. (1968): The students Sanskrit Englishs Dictionary Published by Motilal Banvaridas Publication, Delhi.
- 2. Arunadatta: Sarvangsundari Commentary on Ashtanga Hridaya, Krishnadas Academy, Varanasi.
- 3. Baghel M.S.: Research in Ayurveda, Mridu Ayurvedic Publication, Jamnagar.
- 4. Bhavamishra: 'Bhava Prakasha' with Vidyotini Hindi commentary by Brahmashankar Shastri, Chaukhambha Sanskrit series, Banaras (1956).
- 5. Bhavprakash: Sastu Sahitya Vardhaka Karyalaya, Bombay. 3rd Edition (1982).
- 6. Bhaishajya Ratnavali: Vidhyotinitika, Chaukhambha Sanskrit Series, Varanasi. (1962).
- 7. Chakradatta: Vaidhyaprabha Hindi Vyakhya, Indradeva Tripathi, Chaukhambha Sanskrit series, Varanasi.
- 8. Chakrapani: Ayurveda Dipika commentary on Charaka Samhita, edited by Yadavji Trikamji Acharya, Chaukhambha Sanskrit Sansthana, Varanasi.
- 9. Charaka: Charaka Samhita with Vidhyotini Hindi commentary by Kashinath Shastri and Gorakha Nath, Chaukhambha Bharti Academy Varanasi.
- 10. Charaka: Charaka Samhita with English translation of Chakrapani Commentary, by Bhagwan Das, Chaukhambha Sanskrit Series, Varanasi.
- 11. Chopra R.N. (1965): Glossary of Indian Medicinal Plants, CSIR, New Delhi.
- 12. C Dwarkanatha (1996): Introduction to Kayachikitsa, Chaukhambha orientalia, Varanasi.
- 13. Davidson (1991): Principles and practice of medicine; 16th edition.
- 14. G G Oza (2004): Text book of Clinical Medicine.
- 15. Gerard J Tortora and Sandra Reynolds Grabowski (1993): Principles of Anatomy and Physiology, & 7th edition, Harpercollins college Publishers. Laboratory diagnosis of Iron Deficiency Anaemia: An overview.
- 16. Govind Das: Bhaishajya Ratnavali with Chandraprabha Commentary, edited by Vaidhya Lalchandraji, 8th edition, Motilal Banarasidas, Delhi (1997).

- 17. Harrison: Principles of Medicines, 15th edition edited by Anthony S. Fanci etal, McGraw Hill, Health Professions Division.
- 18. Madhavakara: Madhava Nidana with Madhukosha commentary by Vijayrakshita and Shrikantha Datta with hindi Vidhyotini commentary by Shastri S., Chaukhambha Sanskrita Sansthana, Varanasi.
- 19. Medicinal Plants of India; Vol. I, 1976, Indian Council of Medicinal Research; New Delhi.
- 20. Madhava Nidana Uttaradha Madhukosha with Vidhyotiny, Hindi comm... By Sudarshana Shashtri (1954).
- 21. Michael Swash (1996): Hutchison's Clinical Methods, 20th edition. U.K.
- 22. P. V. Sharma (1994): Dravyaguna Vigyana, 15th edition Chaukhambha Surbharati Academy, Varanasi.
- 23. P. V. Sharma: Ayurvediya Vaigyanika Itihas.
- 24. Satoskar R. S. and Bhandarakara S. D. (1991): Pharmacology and Pharmacotherapeutics, 12th edition, Popular Parakashana, Bombay.
- 25. Savill (1998): System of Clinical Medicine, 14th edition.
- 26. Sharangdhara (1985): Sharangadhara Gudhartha Dipika Comm., edi- Parshurama shashtri Varanasi.
- 27. P.J. Mehta (2003): Practical Medicine, 16th editon, pub. By Mumbai.
- 28. Patil Ashutosh (2004): Efficacy of Kutajadi Kashaya in Sarvatisara.
- 29. Vangasen Samhita (2006): Vangasen Samhita by Nirmal Saxena, Parimal Prakashan ISBN-81-7080-124-9.

REFERRENCE

- Sri Bhavmishra; A.D. C 1500-1600; Comentary by Prof. K. C. Chunekar; Bhava Prakash Nighantu; Publish by Chaukhambha Bharati Acadamy, Varanasi- 2013; Bh.P.-124; P- 338.
- 2. Acharya YT, editor. Charaka Samhita of Agnivesha, Chikitsasthana, Ch. 15, Ver. 14. Reprint ed. Varanasi: Chaukhambha Prakashan, 2007. P. 466.