

**EFFICACY OF TRIPHALA GHRIT AND HARIDRA GHRIT IN
AGNIMANDYA / DYSPHAGIA W.S.R TO PANDU
(IRON DEFICIENCY ANAEMIA)**

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Article Received on 24/05/2016

Article Revised on 14/06/2016

Article Accepted on 03/07/2016

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ABSTRACT

Agnimandya is common symptom in all types of Pandu. Pandu is very common especially in females. Malnutrition and absorption are the general causes of Pandu (Anaemia). In ancient literature like Charak Samhita, Sushrut Samhita Haridra and Triphala are used in many formulations. Whereas Sushruta has recommended it separately for

“Snehpan” in the treatment of Pandu. “Rukshtwa” (Dryness of Dhatu/Skin) is again common symptom in all types of Pandu. 90 patients of age 18-40 yrs were selected in each group Tab. Ferrous sulphate 200mg was taken as control group .It was found that Triphala Ghrith and Haridra Ghrith relieves symptoms of agnimandya acts as appetizer and increase power of digestion after treatment of 1 month. While Tab. Ferrous sulphate showed nausea, hyperacidity, constipation in some patients. Tab. Ferrous sulphate, Triphala Ghrith and Haridra Ghrith increases HB%. Approximately 1 gm/dl after 1 month treatment. Basic parameter like HB%, MCH, MCV, Peripheral blood smear are used. Patients were asked to take proper diet along with this formulations. Further study is required for long duration upto 3 months to observe depletion of iron storage.

KEYWORDS: Pandu, Rukshtwa, Triphala, Haridra, Ghrith, Snehpan.

INTRODUCTION

Pandu means “Pallor”. Charak, Vagbhat, Madhavnidan, Sharandhar, Yogratnakar, Kashyap has mentioned types of Pandu- 1.Vataj 2.Pittaj 3.Kaphaj 4.Sannipataj 4.Mrid Bhakshanjanya.^[1] While Sushrut has mentioned 4 types of Pandu – 1.Vataj 2. Pittaj 3. Kaphaj 4.Sannipataj^[2] Charak and Vagbhat mentioned Agnimandya/dysphasia and Ruhshtwa/dryness specific common symptoms of Pandu.^[3] “Pitta” dosha is mainly responsible for Pandu.^[4] In Sushrut Samhita Triphala Ghrith and Haridra ghrith are recommended in Pandu for snehpan.^[5] and Powder of Haridra and Triphala with honey & ghee is also mentioned in Yog Ratnakar.^[6] Arundatta considered Pachan (Digestion) as the part of activity of agni and the drug which improves digestion is known as paachak dravya. He mentioned it as a type of saman action (Dipan, Pachan).^[7]

Modern Review: Anaemia is the state in which level of HB% in the blood is below the normal range approximate for age and sex. It decreases O₂ carrying capacity of blood.^[8] Dipan means appetizer & Pachan means digestant. Appetizer are the agents employed commonly to stimulate appetite. It augment flow of gastric juice and increases appetite. ant are the drugs or action are claimed to aid digestion in GI track e.g. secretion of HCL, bile, pancreatine etc.^[9] Normal Range of HB%- Male: 13.5 to 17 gms/dl Female 11.5 to 15.5 gm/dl.

Hence, We are studying Efficacy of Triphala Ghrith and Haridra Ghrith in Agnimandya (Dysphagia) w.s.r to Pandu (Iron Deficiency Anaemia)

MATERIAL AND METHOD

TRIPHALA GHRIT and HARIDRA GHRIT are prepared in the Pharmacy of Rasashatra and Bhaishjya Kalpana department of Dr. D. Y. Patil College of Ayurved and R. C, Pimpri, Pune. HARIDRA (Curcuma Longa) and TRIPHALA {Haritaki (T. Chebula), Bibhitak (T. Belerica), Amalki (Emblca officinalis)} are purchased from local market. Identification and Authentication study is conducted in Quality control lab of Dr. D. Y. Patil College of Pharmacy, Pune and Dr. D. Y. Patil Science College (Botany dept) Pune. Ghrith are prepared as per Sharangdhar Samhita.^[10] Finished products are also standardized in Quality control Lab. of RSBK departmental pharmacy as per API.^[11]

TRIPHALA GHRIT

Sr.No.	Test	Findings
1	Description - Color	Yellow
	Odor	Pleasant
	Flowability	Flowable normal
2	Refractive Index	1.455
3	Specific Gravity	0.9027
4	Density	0.935 gm/ml
5	Rancidity	No color formation

HARIDRA GHRIT

Sr.No.	Test	Findings
1	Description - Color	Dark Yellow
	Odor	Pleasant
	Flowability	Flowable normal
2	Refractive Index	1.454
3	Specific Gravity	0.9025
4	Density	0.930 gm/ml
5	Rancidity	No color formation

Study Plan

1. Literary 2. Voluntary

- Literary - Disease Pandu (Iron deficiency Anaemia) is studied from ancient granthas as well as in Modern books. In the same way drug like TRIPHALA and HARIDRA are studied.
- Voluntary – Based on clinical examination and History 90 patients were selected for the study.

Inclusion Criteria

Age Group – 18-40 years – Male and Female

HB% - 8 gm/dl to 10 gm/dl

Peripheral Blood Smear – Microcytic Hypocromic.

Exclusive Criteria

Aplastic Anaemia, Worm Infestation, Thalassemia, Pernicious Anaemia, Pregnant and menopausal females, Menorrhagia, Peptic ulceration, Epistaxis, Septicemia.

Ethical consideration

An informed and written consent was obtained from patients. Permission was granted from local ethical committee.

Group I (Test Group): TRIPHALA GHRIT (20 ml)(6gm/ 20ml) + Honey (10ml)

Group II (Test Group): HARIDRA GHRIT (20 ml) (6gm/ 20ml) + Honey (10 ml)

Group III (Control Group): Tab. Ferrous Sulphate 200mg (60 mg as elemental iron)

Ghrit were given once in a day in the morning (empty stomach for 1 month) while Tab. Ferrous sulphet200mg(60 mg as elemental iron) was given after meal* Twice in a day for 1 month.

Patient advised for including Dal, Rice, Wheat, green vegetable , meat, Dates, Manuka.(Dried grapes) in their diet. To avoid Tea, coffee, Alcohol, tobacco, habits and more spicy food. Patient follow up was taken after 15 days.

Analysis-Parameters

Estimation of HB%, MCV, MCH, Total blood count ,Peripheral blood smear. Clinically observing and questioning to patients. Also analyzed on the basis of s/s of Agnimandya like Food intake capacity (annavaharan), Nausea/ Vomiting (Chardi), Weakness (Daurbalya), extra salivation (Mukhprasek), Heaviness in Head (Shirogaurav), Heavyness in Abdomen (Udargaurav).^[12] Mesurement of these symptoms are graded as shown in table.

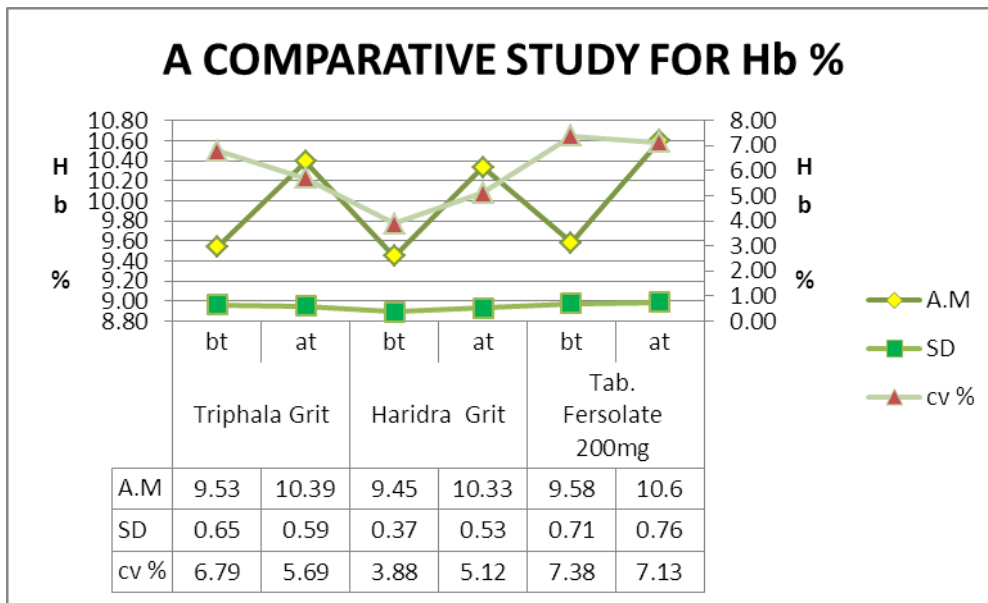
Sr. No	Grade	Result
1	0	Nil
2	1	Poor
3	2	Medium
4	3	Severe

RESULTS

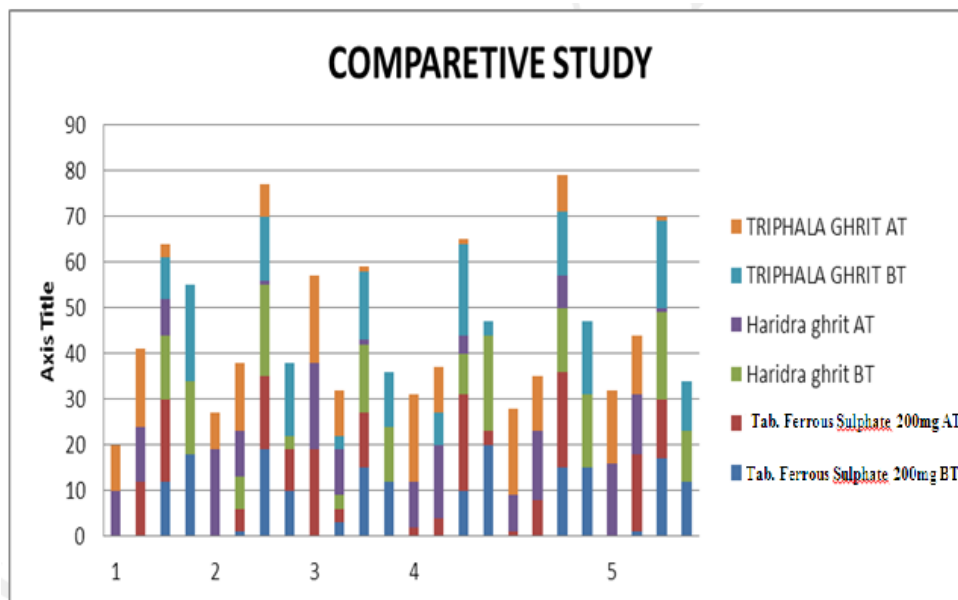
Group I – Triphala Ghrit shows increase in HB% - 1 gm/dl in 1 month. While it relieves symptom of Agnimandya.

Group II – Haridra Ghrit shows increase in HB% - 1 gm/dl in 1 month. It relieves symptom of Agnimandya.

Group III – Tab. Ferrous sulphate 200 mg shows increase in HB% - 1 gm/dl in 1 month. But in some patients it shows s/s abdominal discomfort, Nausea, Anorexia, Constipation.



The Coefficient of variation is more consistent for the Ayurvedic Drugs than the Tab Ferrous sulphate and its values are higher as shown in the graph.



HB%

	Mean		SD		t test	df	p value	Result	Remark
	Before	After	Before	After					
Triphala Grit	9.533	10.392	0.6477	0.5911	-10.1	29	0	<.01	H S
Haridra Grit	9.45	10.333	0.3665	0.5287	-11.5	29	0	<.01	H S
Tab. Ferrous sulphate 200 mg	9.58	10.6	0.7068	0.7561	-26.7	29	0	<.01	H S

Triphala Ghrit

	Mean		SD		t test	df	p value	Result	Remark
	Before	After	Before	After					
Food Intake Capacity	2.7	0.77	0.466	0.626	20.332	29	0	p<.01	H S
Nausea	2.53	0.97	0.507	0.718	17.026	29	0	p<.01	H S
Weakness	2.3	0.4	0.651	0.563	19	29	0	p<.01	H S
Extra Salivation	1.87	0.4	0.571	0.563	14.06	29	0	p<.01	H S
Heaviness in Head	2.53	0.93	0.507	0.785	14.102	29	0	p<.01	H S
Heaviness in Abdomen	2.37	0.5	0.49	0.572	29.571	29	0	p<.01	H S

Haridra Ghrit

	Mean		SD		t test	df	p value	Result	Remark
	Before	After	Before	After					
Food Intake Capacity	2.53	0.93	0.507	0.785	14.102	29	0	p<.01	H S
Nausea	1.87	0.4	0.571	0.563	14.06	29	0	p<.01	H S
Weakness	2.3	0.4	0.651	0.563	19	29	0	p<.01	H S
Extra Salivation	2.7	0.8	0.466	0.664	21.651	29	0	p<.01	H S
Heaviness in Head	2.53	0.97	0.507	0.718	17.026	29	0	p<.01	H S
Heaviness in Abdomen	2.37	0.5	0.49	0.572	29.571	29	0	p<.01	H S

Tab. Ferrous sulphate 200mg

	Mean		SD		t test	df	p value	Result	Remark
	Before	After	Before	After					
Food Intake Capacity	2.6	2.43	0.49	0.62	1.98	29	0.057	p>.01, .05	NS
Nausea	2.3	2.27	0.53	0.58	1.12	29	0.32	p>.01, .05	NS
Weakness	2.3	0.4	0.651	0.563	19	29	0	p<.01	HS
Extra Salivation	2.67	1.83	0.479	0.699	6.53	29	0	p<.01	HS
Heaviness in Head	2.5	1.67	0.509	0.547	7.709	29	0	p<.01	HS
Heaviness in Abdomen	2.37	2.3	0.556	0.59	1.43	29	0.161	p>.01, .05	NS

DISCUSSION

In I,II & III groups patients which has been selected, it is observed that some of the patients has bad habits like chewing tobacco , excess intake of tea, cold drinks , coffee and eat more spicy food. It affects appetite, digestion of food and absorption of iron. In Triphala Ghrit, Triphala acts as appetizer^[13] by emptying the stomach (Gastrokinetic effect) as it is laxative. Vit. C in Amalki (*Emblia officinalae*) enhance absorption of iron.^[14] Haritaki (*Terminalia chebula* contains tanins, chebulic acids & D, galloyl glucose.^[15] Bibhitak (*Terminalia*

bellirica) contains tannins, galic acid , chebulic acid.^[16] In Haridra Ghrit, Haridra (Curcuma longa) having hot potency.^[17] It is haepato protective. It increases HCL secretions in stomach and Bile secretions of liver and acts as appetizer & digestant. Haridra condiments contains iron, curcumine, proteins, mineral matter, zinziberene, sesquiterpenes.^{[18][19]}

CONCLUSION

Triphala Ghrit and Haridra Ghrit acts as appetizer and digestant (Deepan & Paachan)as well as haematinic in Pandu. Tab. Ferrous sul. is a haematic but it shows side effects like nausea, burning sensation in stomach, Anorexia and constipation.

REFERENCES

1. Charak Samhita, Uttarardh, Chi., by Kashinath Shastri, Dr. Gorakhnath Chaturvedi, Chaukhamba Bharti Publication, page no. 487.
2. Sushrut Samhita, Uttarardh, 44/3 by Pranjivan Mehta, Chaukhamba Sanskrit Sansthan publication, page no 290.
3. Charak Samhita, Chi., Uttarardh,by Kashinath Shastri, Dr. Gorakhnath Chaturvedi, Chaukhamba Bharti Publication ,page no. 488.
4. Ashtang Sangrah, Sutra sthan.
5. Sushrut Samhita, Uttar tantra, 44/17 by Pranjivan Mehta, Chaukhamba Sanskrit Sansthan publication, page no 291.
6. Yog Ratnakar, by Laxmipati Shastri, Chaukhamba Sanskrit Sansthan, Pando rog Chikitatsa, chi.21.
7. Ashtang Hridayam, Arun Datta virchit Sarvangsundar Vyakhya, Collated by Dr. Anna Moreshwar Kunte, Krishna Ramchandra Shastri Navre, edited by Bhisagacharya Harishstri Paradkar Vaidya, Krishnadas Acadamy ,Varanasi, Sutra Sthan 14, page no 223.
8. Pharmacology & Pharmacotherapeutics, by Dr.R.S. Satoskar, Dr.S.D. BHandarkar, Dr. S.S. Ainapure, Popular Prakashan, Mumbai, 17th edition.
9. Dravyagun Vigyan, Part 1, by Dr. J L N Shastri,
10. Sharangdhar Samhita,Madhyam Khand, 9/1.
11. The Ayurvedic Pharmacopoeia of India, Part I, Vol. III, Fioirst edition., by Government of India, Ministry of Health and Family Welfare. Dept of Ayurveda.
12. Sarth Bhavprakash,by Pandit Shri. Brahmashankar Mishra, Chaukhamba Sanskrit prakashan, Part 2, Adhyay 6, page no 67.

13. Sushrut Samhita, Sutra sthan, 38/57 by Pranjivan Mehta, Chaukhamba Sanskrit Sansthan publication, page no 145.
14. Pharmacology & Pharmacotherapeutics, by Dr.R.S. Satoskar, Dr.S.D. BHandarkar, Dr. S.S. Ainapure, Popular Prakashan, Mumbai, 17th edition.
15. Bhavprakash Nighantu by Ganga Sahay Pandey, Krishna Chandra Chunekar, page no. 205.
16. Bhavprakash Nighantu by Ganga Sahay Pandey, Krishna Chandra Chunekar, page no. 198.
17. Bhavprakash Nighantu by Ganga Sahay Pandey, Krishna Chandra Chunekar, page no. 115.
18. Pharmacognosy of Indigenous Drugs, Vol I, CCRAASI, compliing & Editing by K.Raghunathan & Miss Roma Mitra, page no. 376.
19. Pharmacology & Pharmacotherapeutics, by Dr.R.S. Satoskar, Dr.S.D. BHandarkar, Dr. S.S. Ainapure, Popular Prakashan, Mumbai, 17th edition, page no. 479.