



International Research Journal of Ayurveda & Yoga

An International Peer Reviewed Journal for Ayurveda & Yoga



SJIF Impact Factor : 5.69

ISRA Impact Factor : 1.318

ISSN:2581-785X

Research Article

Volume: 3

Issue: 9

A Controlled Comparative Clinical Study On *Vyoshadi Choorna* With *Takra* And *Dhatri Loha* In The Management Of *Pandu* With Special Reference To Iron Deficiency Anaemia

DR. Sanjana SG ¹, DR. Rupa Bhat²,

- 1- PG Scholar, dept of Kayachikitsa, Dhanvantari Ayurveda College, Hospital and PG research centre, SIDDAPUR, KARNATAKA
- 2- Professor and HOD, dept of Kayachikitsa, Dhanvantari Ayurveda College, Hospital and PG research centre, SIDDAPUR, KARNATAKA

ABSTRACT: *Pandu* is explained as *Rasapradoshaja Vikara* and *Raktavaha srhotodushti Vikara*. It is *Pitta* predominant disorder involved with vitiation of all three *Doshas* and *Rasa, Rakta, Mamsa* and *Twak Dushyas*. It has similar signs and symptoms that of iron deficiency anaemia like *Panduta* (pallor) *Hridayaspandana* (palpitation), *Rukshatwacha* (dried skin). It is very common prevalent disease in the society. *Dhatri loha* is explained in the context of *Shoolapratishedha* and is also indicated in *Pandu*. *Dhatriलोहा* is proved to be an effective formulation in the management of *Pandu*. *Vyoshadi choorna* explained in the context of *Choornaprakarana* in *Sahasrayogam*, mainly indicated in *Pandu Roga*. *Trikatu, Ayasa choorna* which have *Teekshna, Ushnagunas* are predominant drugs can be effectively acts on *Pandu Roga*. Objective of the study is to know the efficacy of *Vyoshadichoorna* and *Dhatriलोहा* in *Pandu*. 40 Patients of *Pandu* (IDA) will be taken one who fulfilling the inclusion criteria and divided into two groups randomly.

GROUP A ; 20 patients of *Pandu* (IDA) is given *Vyoshadichoorna*

GROUP B ; 20 patients of *Pandu* (IDA) is given *Dhatriलोहा* for 45 days. Both the groups are having similar effect on reducing the symptoms statistically. Among the subjective and objective parameters B group showed better result than Group A.

Key words: *Pandu Roga*, Iron deficiency anaemia, *Dhatriलोहा*, *Vyoshadichoorna*

Article received on-31 August

Article send to reviewer on-3 Sept.

Article send back to author on-18 Sept.

Article again received after correction on -24 Sept.

Corresponding Author : DR. Sanjana SG ,
PG –scholar, dept of Kyachikitsa, Dhanvantari
Ayurveda College,Hospital and PG research centre,
SIDDAPUR,KARNATAKA, Email, Id-
Sanjana.sg11@gmail.com

How to Cite the Article : DR. Sanjana SG , DR. Rupa Bhat, A Controlled Comparative Clinical Study On *Vyoshadi Choorna With Takra And Dhatri Loha* In The Management Of *Pandu* With Special Reference To Iron Deficiency Anaemia , IRJAY, September: 2020 Vol- 3, Issue-9; 223-235;

Doi: <https://doi.org/10.47223/IRJAY.2020.3905>

INTRODUCTION:

The principal objectives of *Ayurveda* include maintenance and promotion of health, prevention of disease and cure of sickness. *Ayurveda*, *Pandu* is considered as a specific disease with its own pathogenesis and treatment (*Cha. Chi. 16th chap, Su. Utt. 44th chap*) *Pandu* is explained as *Rasapradoshaja Vikara* by *Charaka*¹. But *Sushruta* considered it is as *Raktavahasrhotodushti Vikara*². It is *Pitta* predominant disorder involved with vitiation of all three *Doshas* and *Dushyas* involved are *Rasa*, *Rakta* , *Mamsa* and *Twak* .It develops due to depletion of *Rasadhatu* which in turn becomes ineffective the production of *Raktadhatu*. There are various causes for *Pandu*, *Akala Bhojana*, *Athiteekshana*, *Athikatu*, *Ushna*, *Amla*, *Tikta*, *Lavanadravyatake*, *Atimadhyapana*, *Ativyayama*, *Diwaswapna* are

Samanya Nidhana for *Pandu*. Even after several decades, if we have not understood the various factors related to food and regimen that give rise to anaemia. *Panduroga* is a disease entity described in *Ayurveda* which bears great resemblance to the clinical picture of Iron deficiency anaemia like *Hridayaspandana* (palpitation), *Ruksha Twacha* (dried skin), *Panduta Varna* (pallor).and *Mrutbhakshana* (pica). The symptoms of *Pandu Roga* like *Daurbalya* , *Arohanayasa* , *Agnimandya* , *Pindikodweshtana* etc. Make the patient very feeble and unable to carry out normal duties satisfactorily. IDA is Reduction of haemoglobin, number of RBCs percumm of blood and quantity of Hb% are resulting in pallor of the skin⁶. In Greek Anaemia means ‘Lack of Blood’. In India, anaemia affects an estimated 50% of

the population. The problem becomes more severe as more women are affected with it as compared to men. It is estimated that about 20- 40% of maternal deaths in India are due to anaemia and one in every two Indian women (56%) suffers from some form of anaemia³. According to NATIONAL HEALTH SURVEY (NFHS), the incidence of anaemia in urban 71%, rural 84%, and overall 79%. In allopathic, mild to moderate iron deficiency anaemia treated by supplementation of ferrous sulphate, ferrous fumarate, or ferrous gluconate. By these supplementations, side effects like upset of stomach or darkening of stools and less amount of iron absorption along with food are experienced. Hence to get better result in the treatment aspect alternative herb-minerals are used according to *Ayurveda*. *Dhatri loha* is explained in the context of *Shoola Pratishedha* and is also indicated in *Pandu*. *Dhatriloha* is proved to be an effective formulation in the management of *Pandu*. *Vyoshadi Choorna* explained in the context of *Choorna Prakarana* in *Sahasrayogam*, mainly indicated in *Pandu Roga*. *Trikatu*, *Ayasachoorna* which have *Teekshna*, *Ushnagunas* are predominant drugs can be effectively acts on *Pandu Roga*.

AIMS AND OBJECTIVES

1. To evaluate the clinical efficacy of *Vyoshadi Choorna* with *Takra* in *Pandu* with special reference to Iron deficiency anaemia
2. To evaluate the clinical efficacy of *Dhatri Loha* in the management of *Pandu* with special reference to Iron deficiency anaemia.
3. To compare the efficacy of both groups.

HYPOTHESIS

H₀ :-*Vyoshadichoorna* with *Takra* and *Dhatriloha* either of drugs have same efficacy

H₁:-*Vyoshadichoorna* with *Takra* has more efficacy than *Dhatriloha*

H₂:-*Dhatriloha* has more efficacy than *Vyoshadichoorna*.

Method of collection of data:

The present study is a ‘randomized clinical study’.

- A comparative clinical study where in 40 patients presenting with *Lakshanasof Pandu*, of either sex were

randomly assigned into two groups; each Comprising of 20 patients.

- A case proforma containing all necessary details pertaining to study was prepared.

- The parameters considered for the study were scored as mentioned in the Proforma

DRUG REQUIREMENTS;

Table 1- VYOSHADI CHOORNA WITH TAKRA⁴

S.NO	NAME OF PLANT	BOTONICAL NAME	PART USED	PROPORTION
1	<i>Shunti</i>	<i>Zingiber Officinis</i>	Root	<i>1 / 3 Of trikatu</i>
2	<i>Pippali</i>	<i>Piper longum</i>	Fruit	<i>1 / 3 Of trikatu</i>
3	<i>Maricha</i>	<i>Piper nigrum</i>	Fruit	<i>1 / 3 Of trikatu</i>
4	<i>Chitraka</i>	<i>Plumbago zeylanica</i>	Root	1
5	<i>Vidanga</i>	<i>Embeliaribes</i>	Seeds	1
6	<i>Musta</i>	<i>Cyperusrotundus</i>	Seeds	1
7	<i>Harithaki</i>	<i>Terminalia chebula</i>	Fruits	<i>1/3 of triphala</i>
8	<i>Bibithaki</i>	<i>Terminalia bellerica</i>	Fruits	<i>1/3 of triphala</i>
9	<i>Amalaki</i>	<i>Embilica officinalis</i>	Fruits	<i>1/3 of triphala</i>
10	<i>Lohabhasma</i>			5

Prepare *Choorna* with all ingredients mentioned in the above table with specified quantity and administer with *Takra*.

Table 2- DHATRI LOHA⁵

S No	Name of Plant	Botanical Name	Part used	Proportion
1	<i>Dhatri</i>	<i>Emblica officinalis</i>	Fruit	4
2	<i>Lohabhasma</i>			2
3	<i>Yashtimadhu</i>	<i>Glycyrrhiza glabra</i>	Root	1
4	<i>Guduchi(amruta)</i>	<i>Tinospora cordifolia</i>	Stem,leaf	1

Ingredients from 1 to 3 are powdered separately and mixed together and it is given *Bhavana* with *Amruta Kashaya* for seven days and then it is taken and dried in the sun light. Then triturate it again, prepare vatis of 500mg and store in air tight container.

Anupana: Honey.

RESEARCH DESIGN

40 Patients of *Pandu* (IDA) are taken one who fulfilling the inclusion criteria and divided into two groups randomly.

GROUP A ;

20 patients of *Pandu*(IDA) is given *Vyoshadichoorna* – 1 table spoon twice a day with 40 ml *Takra* as *Anupana*.

Half an hour before food for 45 days.

GROUP B ;

20 patients of *Pandu* (IDA) is given *Dhatriloha* 1 tablet (500mg) twice a day , honey as *Anupana* ,

half an hour before food for 45 days.

INCLUSION CRITERIA

1. Patients with cardinal symptoms of *Pandu* w.s.r. Iron deficiency anaemia.
2. Patients with HB % range of 7 to 10%
3. Patients of either sex
4. Patients age of 10 to 60 years
5. HB %, PCV CBC.

EXCLUSION CRITERIA

1. Patients with history of systemic disorders like cardiac, renal ,liver disorders, rheumatoid arthritis ,diabetes mellitus and hypertension.
2. Congenital disorders like haematopoietic system like thalassemia, sickle cell anaemia, leukaemia.

3. One who suffering from bleeding disorders like haemophilia.
4. Pregnant ladies.

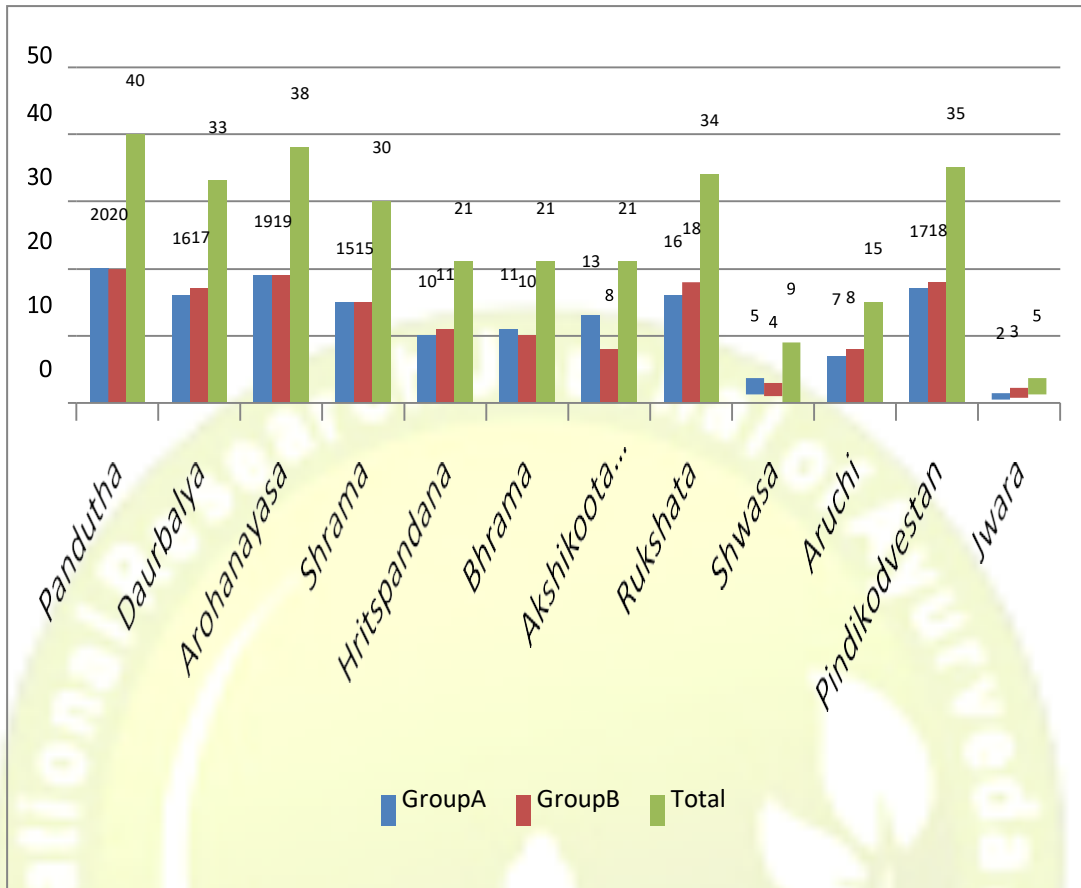
DIAGNOSTIC CRITERIA

1. Clinical signs and symptoms of *Pandu Roga / IDA*
2. *Pandutha*
3. *Alasya*
4. *Durbalata*
5. *Shrama*
6. *Shirashula*
7. *Hridayaspandana*
8. *Aruchi*
9. *Rukshata*
10. *Shotha*
11. *Jwara*

OBSERVATION

Table 3 Showing the Distribution of Patients on the basis of Presenting Complaints.

Presenting Complaints	Group A		Group B		Total	
	No.	%	No.	%	No.	%
<i>Pandutha</i>	20	100%	20	100%	40	100%
<i>Alasya</i>	16	80%	17	85%	33	82.5%
<i>Daurbalya</i>	19	95%	19	95%	38	95%
<i>Shrama</i>	15	75%	15	75%	30	75%
<i>Hritspandana</i>	10	50%	11	55%	21	52.5%
<i>Shiroruja</i>	11	55%	10	50%	21	52.5%
<i>Shotha</i>	13	65%	08	40%	21	52.5%
<i>Rukshata</i>	16	80%	18	90%	34	85%
<i>Shwasa</i>	05	25%	04	20%	09	22.5%
<i>Aruchi</i>	07	35%	08	40%	15	37.5%
<i>Jwara</i>	02	10%	03	15%	05	12.5%



1. **Effect on Pandutha:** In group A, statistical analysis revealed that 60 % improvement. In group B revealed that the 66.6% relief.
2. **Effect on Alasya:** In group A, 84% improvement. In group B, 94%improvement.
3. **Effect of Dourbalya :** In group A, 85% improvement, In group B, 100% improvement
4. **Effect on Shrama :** In group A, 66% improvement, In group B, 76% improvement
5. **Effect on Shiroruja:** In group A, 61% improvement, In group B, 84% improvement
6. **Effect on Hritspandana :** group A, 61.5% improvement, In group B, 66.5% improvement

7. **Effect on Rukshata;** group A, 77% improvement, In group B, 94% improvement
Effect on Shwasa: group A, 75% improvement, In group B, 54% improvement
Effect on Aruchi : group A, 100% improvement, In group B, 100% improvement
8. **Effect on Jwara :** group A, 60% improvement, In group B, 100% improvement
9. **Effect on Haemoglobin %:**In group A, 10% improvement In group B, 24% improvement
10. **Effect on PCV:** In group A, 11% improvement In group B, 14% improvement

Table 4- Showing improvement in percentage wise in both group A and Group B

EFFECTS ON	GROUP A	GROUP B
<i>Pandutha</i>	60 %	66.6%
<i>Alasya</i>	84%	94%
<i>Daurbalya</i>	85%	100%
<i>Shrama</i>	66%	76%
<i>Hritspandana</i>	61.5%	66.5%
<i>Shiroruja</i>	61%	84%
<i>Rukshata</i>	77%	94%
<i>Shwasa</i>	75%	54%
<i>Aruchi</i>	100%	100%
<i>Jwara</i>	60%	100%
Haemoglobin	10%	24%
<i>PCV</i>	11%	14%

RESULT

Unpaired t test

Table no 5- showing the Statistical analysis of Group A and Group B after Treatment

Parameters	Group A			Group B			t value	df	p value	Remarks
	N	MD	SD	N	MD	SD				
<i>Pandutha</i>	20	0.6	0.5	20	0.75	0.55	0.9002	38	>0.05	NS
<i>Alasya</i>	20	0.0	0.0	20	0.2	0.41	2.17	38	<0.05	SS
<i>Daurbalya</i>	20	0.0	0	20	0.25	0.44	2.5	38	<0.05	SS
<i>Shrama</i>	20	0.1	0.31	20	0.35	0.49	1.9	38	>0.05	NS
<i>Shiroruja</i>	20	0.25	0.55	20	0.55	0.37	0.67	38	>0.05	NS
<i>Hritspandana</i>	20	0.20	0.41	20	0.30	0.47	0.76	38	>0.05	NS
<i>Rukshata</i>	20	0.1	0.31	20	0.05	0.22	0.58	38	<0.05	SS
<i>Shotha</i>	20	0	0	20	0.15	0.37	1.83	38	>0.05	NS
<i>Shwasa</i>	20	0	0	20	0	0	0	38	>0.05	NS
<i>Aruchi</i>	20	0.6	0.6	20	0.25	0.44	2.1006	38	<0.05	SS
<i>Jwara</i>	20	0.2	0.4	20	0	0	2.17	38	0.0269	SS
Hb	20	1.48	0.53	20	2.85	0.91	5.82	38	<0.001	HS
PCV	20	2.47	3.27	20	5.73	4.59	2.59	38	<0.05	SS
RBC	20	0.6	3.3	20	0.92	4.3	1.2	38	>0.05	NS

Based on the results obtained from unpaired t test the overall improvements seen in Group B are more significant than that of Group A.

DISCUSSION

The present study has facilitated the proper understanding of the importance and gravity of *Pandu Roga*. It is pitta predominant disorder. Vitiating pitta with *vayu* enters between *mamsa and twak*, there vitiating *tridoshas, twak, rakta, mamsa* produces *panduta, harita, haridra* etc. *varna*. The three fold approach in treatment of *Pandu* viz. *Shodhana - Shamana - Brimhana* is unique to Ayurveda in comparison to other contemporary medical systems. The scientific approach of our Acharyas in prescribing Iron compounds is awe inspiring. Iron is not administered in its inorganic elemental form, but processed with organic herbs to make

it readily acceptable by the body. Further, the presence of *Amalaki*, a rich source of Vitamin C which is essential for iron absorption, in most of the *Loha Yogas* portrays the deep insight and wisdom of our Acharyas. Anaemia is defined as a state in which the blood HB% is below the normal range, with relation to patient's age and sex. Iron deficiency occupies an unusual classification of anemia, moderate form, it presents itself with symptoms like fatigue, loss of appetite, weakness, breathlessness and palpitation, particularly with physical exertion and pallor of the skin and the mucous membrane.

CONCLUSION

1. The statistical analysis of the results obtained in the present clinical work suggests that the interventions of both Group A and Group B are effective in the management of *Pandu Roga*. But

Group B (*Dhatri Loha*) showed significantly better response than Group A (*Vyoshadi Churna with Takra*).

2. The study reiterates the efficacy of *Dhatri Loha* in the management of *Pandu Roga*.
3. The study shows that *Vyoshadi Churna* with *Takra* is also useful in the management of *Pandu Roga* with special reference to iron deficiency anaemia.

LIMITATIONS OF THE STUDY:

1-Sample Size- The sample size of 40 subjects is a very small one, not sufficient to generalize the interpretations of the study. But in the given circumstances it was not practical to conduct the study on a bigger population. The same study conducted on a bigger population would have given better clarity to the

interpretations.

2-Duration of study- The study was carried out for a duration of one month. A longer duration of treatment and multiple follow-ups spread over a longer period would have given a deeper understanding of the disease and a better assessment.

3-Investigations- The study was conducted at Siddapur, a semi urban area which lacks facilities to conduct specialized investigations to assess Serum Iron, Ferritin Level, total Iron Binding Capacity (TIBC) etc. The availability of these facilities would have helped in having a deeper insight and better assessment of the present study

Acknowledgement:- Nil

Financial Assistant:- Nil

Conflict of interest :- Nil

REFERENCES

1. Vaidya Harisha chandra SimhaKushavaha Charaka Samhita , With Commentary by Cakrapani Datta, Chowkhamba Sanskrit Series,2014 , Vsaransi, Sutra Sthana,28th Chap,10th Shloka,P-474.
2. Sri kantha Murthy Kr Translator,Susrutha Samhita, With Commentary by Dalhan acharya, Chowkhamba Orientalia 2008 ,Varanasi.P.386.
3. National Family Health Survey (NFHS-III), 2005-2006, <http://www.nfhsindia.org/pdf/India.pdf>, last accessed on 4th February, 2014.
4. R.Vidyanath And K.Nishteswar,Sahasrayogam, Varanasi, Chowkhamba Sansrit Series ,2008.Choorna Prakaran,4thChapt 63. P.195.
5. Kanjiv LochanTranslated Bhaisajya Ratnavali, Bhisagratna,407, Chowkhamba Sanskrit Sansthan.Vol Varanasi, ,Shoolaroga Chiktsaparakarana 30/149 -154, P. 358