

Comparative Study of Sammoha Loha, Navayas Loha & Mustadi Churna in the Pandu Vyadhi W.S.R. Anaemia

Dr. Sanjay A. Dhurve (M.D., Ph.D.)

Assistant Professor, Department of Kayachikitsa, Bharati Vidyapeeth Deemed University College of Ayurved, Pune -Satara Road, Pune-411043, India

Email: [dr.sanjaydhurve\[at\]gmail.com](mailto:dr.sanjaydhurve[at]gmail.com)

Abstract: To Study the efficacy of Sammoha Loha, Navayas Loha, and Mustadi Churna, by conducting clinical trials on Pandu Vyadhi W.S.R. to Anaemia & To see side effects or adverse effects (if any) of Sammoha Loha, Navayas Loha, and Mustadi Churna during clinical trials. Results in comparing all the symptoms before and after treatment of three groups had significant action in management of Pandu Vyadhi. Treatment had no side effects on clinical trial. All three groups had significant effective in the management of the Pandu Vyadhi w.s.r. Anaemia.

Keywords: Sammoha Loha, Navayas Loha, Mustadi Churna, Pandu

1. Introduction

Pandu, is a disease characterized by pallor of body which strikingly resembles with 'Anaemia' of modern science, disease to reduction in number of RBC's per cumm of Blood and quantity of Hb resulting in Pallor like other symptoms. The disease Pandu Roga that is dealt in all Ayurvedic texts with its treatment, which is very much similar to Anaemia in later period. The Pandu Roga has very much similarity with Anaemia according to modern text. The word Anaemia first appeared for medical use in 1824 and in 1849 it began to have a specific medical meaning. It is one of the common clinical conditions both in the developed and developing countries like India. The W.H.O. has recognizes as a world health problem, which is much common in our country.

The disease Pandu Roga is explained in all most all Ayurvedic classics with its etiopathogenesis and treatment elaborately. Ayurveda advocates the treatment of Pandu with many herbal and herbo-mineral Preparations. Charaka (C.Chi. 16/72), Vagbhata (A.H.Chi. 16/25), Bhaishajya Ratnavali (Pandu Rogadhikar 11/4) have highlighted the combination of Loha kalpas in Pandu vyadhi.

Loha kalpa yoga is one of the important medicines used in Pandu Roga as mentioned in Bharat-Bhaishajya Ratnavali. Loha kalpa yoga is easily available cheap and very effective in its qualities and thus this prospective study is being conducted to evaluate the effect of it as combination in Pandu Roga.

HYPOTHESIS

H0 –Sammoha Loha, Navayas Loha & Mustadi Churna is not effective in the management of Pandu Vyadhi w.s.r. Anaemia.

H1 –Sammoha Loha, Navayas Loha & Mustadi Churna is effective in the management of Pandu Vyadhi w.s.r. Anaemia

2. Aim and Objectives

Aim

- 1) To compare efficacy of Sammoha Loha, Mustadi Churna and Navayas Loha in Pandu Roga
- 2) To clinically assess the efficacy of Sammoha Loha, Mustadi Churna, and Navayas Loha in management of Pandu Vyadhi.
- 3) To study the side effect of drug if any.

Objectives

- 1) To study literary review of Pandu Roga in the light of description of Anaemia.

3. Materials and Methods

Materials

A) Patients: Patients were selected on Random basis from OPD and IPD of Bharati Vidyapeeth University Ayurved Hospital, Dhankawadi, Pune.

B) Drug

Group-A: Sammoha Loha: (Reference: Bharat Bhaishajya Ratnakar – Pandu Roga Adhikara)

S. No.	Name of Ingredient	Botanical Name	Quantity
1.	Sunthi Churna	Zingiber Officinale	1 Part
2.	Marich Churna	Piper Nigrum	1 Part
3.	Pippali Churna	Piper Longum Linn	1 Part
4.	Haritaki Churna	Terminalia Chebula	1 Part
5.	Bhibhitaki Churna	Terminalia Bellerica Roxb.	1 Part
6.	Chitak Mula Churna	Plumbago Zeylanica Linn.	1 Part
7.	Vidanga Churna	Embelia Ribes Burn F.	1 Part
8.	Loha Bhasma	Ferrum (Fe)	1 Part
9.	Aabhak Bhasma	Mira	1 Part

Group B: Mustadi Churna (Reference: - Rasa-ratna Samuchaya Adhyay 19/108)

S No.	Name Of Ingredient	Botanical Name	Quantity
1.	Musta Churna	Cyperus Rotundus Linn.	1 Part
2.	Guduchi Churna	Tinospora Cordifolia	2 Part
3.	Chitak Mula Churna	Plumbago Zeylanica Linn.	3 Part
4.	Yastimadhu Churna	Glycyrrhiza Glabra	4 Part
5.	Pippali Churna	Piper Longum Linn	5 Part
6.	Vidanga Churna	Embelia Ribes Burn F.	6 Part
7.	Sunthi Churna	Zingiber Officinale	7 Part
8.	Haritaki Churna	Terminalia Chebula	8 Part
9.	Bhibhitaki Churna	Terminalia Bellerica Roxb.	9 Part
10.	Amalaki Churna	Embllica Officinalis Gaertn	10 Part
11.	Suvarna Makshik Bhasma	Chalcopryrite.	11 Part
12.	Loha Bhasma	Ferrum (Fe)	12 Part

NAVAYAS LOHA: (Reference: - Bhaishajya Ratnavali-12/28)

S No.	Name of Ingredient	Botanical Name	Quantity
1.	Sunthi Churna	Zingiber Officinale	1 Part
2.	Marich Churna	Piper Nigrum	1 Part
3.	Pippali Churna	Piper Longum Linn	1 Part
4.	Haritaki Churna	Terminalia Chebula	1 Part
5.	Bhibhitaki Churna	Terminalia Bellerica Roxb.	1 Part
6.	Amalaki Churna	Embllica Officinalis Gaertn	1 Part
7.	Musta Churna	Cyperus Rotundus Linn.	1 Part
8.	Vidanga Churna	Embelia Ribes Burn F.	1 Part
9.	Chitak Mula Churna	Plumbago Zeylanica Linn.	1 Part
10.	Loha Bhasma	Ferrum (Fe)	1 Part

Study Design: Pandu roga is diagnosed according to both Ayurvedic and Modern systems of Medicine, and the clinical findings are evaluated in the light of Modern Laboratory Techniques.

Source of Collection of Data: For this clinical trial 60 patients were selected from the O.P.D. & I.P.D. of the Post Graduate department of Bharati Ayurved Hospital B.V.D.U. Pune.

Inclusion Criteria

- 1) Sex - Male/ Female
- 2) Age – 15 to 70 years
- 3) All types of Pandu vyadhi (Vataj, Pittaj, Kaphaj, Sannipataj and Mruda Bhakshanjya Pandu)
- 4) Iron Deficiency Anaemia
- 5) Diagnosis of Pandu vyadhi as per Ayurvedic text supported by Modern Medicine system.

Exclusion Criteria

- 1) HB is equal and less than five < 5 gm%
- 2) Pandu associated with severe jaundice.
- 3) Any type of Malignant Disease. i.e., Leukemia, Metastatic cancer etc.
- 4) Poisoning
- 5) Pregnancy
- 6) Anaemia associated with other disease like Diabetes, Liver cirrhosis, Ascites and CCF
- 7) Acute Hemorrhagically and infectious condition.
- 8) Patient having treatment from any otherpathy for same problem.

Criteria for Diagnosis

- 1) Pandu Roga was diagnosed amongst patients reported to Hospital based on classical features and were selected irrespective of Sex, Occupation, and Religion. Patients of age group between 15-70 years were selected for study.
- 2) The diagnosis of the disease 'Pandua' was made after thorough examination of the patient. A case proforma was prepared which gives complete information about the history, Physical finding and Laboratory finding.
- 3) Estimation of Hb% and RBC Count was carried out for each and every patient to have a support for the claim of disease and as well as to have an idea about the effect and efficacy of the drug on Pandu Roga in general and Hb% of particular. Necessary lab investigation was carried out, as they are more informative about the disease Pandu and as well as general condition of the patient.

Randomized Controlled Single Blind Study:

No. of Patients	20 in each group
Total Patient	60
Dose of Drugs	250 mg twice daily for all group
Anupan	Madhu
Duration	1 month
Follow-up	7 th , 14 th , 21 st , 30 th day

Assessment Criteria

- 1) Patients were assessed after the giving medicine on 7th, 14th, 21st, 30th day
- 2) Subjective parameter was based upon symptomatic Relief as narrated by the patients and evaluated as per Ayurvedic texts.
- 3) Obtained results in each of the symptoms were graded as follows: 0- No symptom, 1- Minimum, 2- Mild, 3- Moderate 4- Severe

Objectives Parameters:

- 1) Hb %
- 2) RBC
- 3) ESR

Withdrawl Criteria: - The patient was withdrawn from the trial if:

- 1) The patient is not willing to continue the trial to follow the assessment schedule.
- 2) If occurrence of serious adverse events.
- 3) The investigator feels that the protocol has been violated OR patient has become in co-operative.

Parameters of Assessment: -Relevance of sign and symptoms as per described in Ayurvedic Symptomatology:

- 1) Panduta Twaka
- 2) Nakh Panduta
- 3) NetraPanduta
- 4) AkshikutShoth
- 5) Agnimandya
- 6) Aruchi
- 7) Avipaka
- 8) Daaha
- 9) Daurbalya
- 10) Trushna
- 11) Kativedana

- 12) Saktivedana
- 13) Paadvedna
- 14) Bhram
- 15) Asahishnuta
- 16) Shram Shwas

- **Efficacy Score System: - Severity Index:** - Subjective parameters – severity of symptoms was assessed by grading 0- No symptom, 1- Minimum, 2-Mild, 3- Moderate, 4- Severe
- **Primary End Point:** - Improvement in the signs and symptoms of Pandu Vyadhi in the patients.
- **Secondary End Point:** - effect of Sammoha Loha, Mustaadi Churna, and Navayas Loha in management of Pandu Vyadhi.

4. Observation and Result

Age Wise Distribution of 60 Patients of Pandu Roga

Age in year	Group-A	Group-B	Group-C	Total	Percentage
15- 30	3	5	3	11	18.33%
31 -40	4	4	7	15	25.00%
41 -50	3	2	4	09	15.00%
51 -60	6	4	3	13	21.67%
61-70	4	3	5	12	20.00%

Lakshan Wise Distirbution of 60 Patients of Pandu

S.No	Lakshan	Group-A	Group-B	Group-C	Total	Percentage
1	Panduta Twaka	13	11	09	33	55.00%
2	Nakh Panduta	20	19	20	59	98.33%
3	Netra Panduta	20	20	20	60	100 %
4	Akshikut Shoth	09	07	10	26	43.33%
5	Agnimandya	20	20	20	60	100 %
6	Aruchi	18	18	20	56	93.33%
7	Avipaka	14	09	11	34	56.67%
8	Daaha	17	11	13	41	68.33%
9	Daurbalya	19	08	12	39	65.00%
10	Trushna	20	12	14	46	76.67%
11	Kativedana	14	12	11	37	61.67%
12	Saktivedana	15	16	19	50	83.33%
13	Paadvedna	13	17	18	48	80.00%
14	Bhram	19	16	19	54	90.00%
15	Asahishnuta	20	19	19	58	96.67%
16	Shram Shwas	13	10	15	38	63.33%

Effect of Sammoha Loha, Navayas Loha & Mustadi Churna in Subjective Criteria of Pandu

AGNIMANDYA	Day-0		Day-30		Wilcoxon Signed Ranks Test Z	P
	Mean score	S. D	Mean score	S. D		
Group-A	3.65	0.587	0.20	0.410	4.021	<0.001 HS
Group-B	3.50	0.607	0.45	0.510	4.056	<0.001 HS
Group-C	3.60	0.503	0.35	0.489	4.018	<0.001 HS
NAKHA PANDUTA	Day-0		Day-30		Wilcoxon Signed Ranks Test Z	P
	Mean score	S. D	Mean score	S. D		
Group-A	2.90	0.788	0.25	0.444	4.028	<0.001 HS
Group-B	2.95	1.05	0.60	0.503	3.852	<0.001 HS
Group-C	3.15	0.875	0.40	0.503	3.984	<0.001 HS
NETRA PANDUTA	Day-0		Day-30		Wilcoxon Signed Ranks Test Z	P
	Mean score	S. D	Mean score	S. D		
Group-A	3.15	0.875	0.35	0.587	3.999	<0.001 HS
Group-B	3.0	0.918	0.50	0.513	4.035	<0.001 HS
Group-C	3.20	0.834	0.30	0.470	3.976	<0.001 HS
AKSHIKUTA SHOTHA	Day-0		Day-30		Wilcoxon Signed Ranks Test Z	P
	Mean score	S. D	Mean score	S. D		
Group-A	1.85	1.040	0.05	0.224	3.697	<0.001 HS
Group-B	1.75	1.293	0.20	0.410	3.561	<0.001 HS
Group-C	2.70	1.342	0.20	0.410	3.803	<0.001 HS
ARUCHI	Day-0		Day-30		Wilcoxon Signed Ranks Test Z	P
	Mean score	S. D	Mean score	S. D		
Group-A	1.95	1.099	0.25	0.444	3.782	<0.001 HS
Group-B	1.65	0.933	0.25	0.444	3.695	<0.001 HS
Group-C	2.40	1.095	0.20	0.410	3.981	<0.001 HS
AVIPAK	Day-0		Day-30		Wilcoxon Signed Ranks Test Z	P
	Mean score	S. D	Mean score	S. D		
Group-A	1.90	0.852	0.0	0.0	3.886	<0.001 HS
Group-B	0.80	0.894	0.0	0.0	2.889	0.004 Sig
Group-C	1.35	1.04	0.0	0.0	3.402	0.001 Sig
DAAHA	Day-0		Day-30		Wilcoxon Signed Ranks Test Z	P
	Mean score	S. D	Mean score	S. D		
Group-A	1.45	0.887	0.0	0.0	3.695	<0.001 HS
Group-B	0.90	1.165	0.0	0.0	2.694	0.007 Sig
Group-C	1.25	1.07	0.0	0.0	3.270	0.001 Sig
DAURBALYATA	Day-0		Day-30		Wilcoxon Signed Ranks Test Z	P
	Mean score	S. D	Mean score	S. D		

Group-A	2.05	0.826	0.15	0.366	4.061	<0.001 HS
Group-B	0.80	1.056	0.20	0.410	2.460	0.014 Sig
Group-C	1.35	1.226	0.20	0.410	3.213	0.001 Sig
TRUSHNA	Day-0		Day-30		Wilcoxon Signed Ranks Test Z	P
	Mean score	S. D	Mean score	S. D		
Group-A	2.75	0.910	0.15	0.366	3.992	<0.001 HS
Group-B	1.65	1.599	0.20	0.410	3.134	0.002 Sig
Group-C	2.20	1.436	0.20	0.410	3.580	<0.001 HS
SHRAMSHAWAS	Day-0		Day-30		Wilcoxon Signed Ranks Test Z	P
	Mean score	S. D	Mean score	S. D		
Group-A	3.15	0.933	0.20	0.410	3.968	<0.001 HS
Group-B	1.70	1.689	0.20	0.410	2.980	0.003 Sig
Group-C	2.45	1.605	0.25	0.444	3.477	0.001 Sig
SAKTI VEDNA	Day-0		Day-30		Wilcoxon Signed Ranks Test Z	P
	Mean score	S. D	Mean score	S. D		
Group-A	1.70	0.801	0.05	0.224	3.835	<0.001 HS
Group-B	1.85	0.933	0.10	0.308	3.831	<0.001 HS
Group-C	1.85	0.875	0.10	0.308	3.904	<0.001 HS
PAAD VEDNA	Day-0		Day-30		Wilcoxon Signed Ranks Test Z	P
	Mean score	S. D	Mean score	S. D		
Group-A	1.30	1.174	0.05	0.224	3.228	0.001 Sig
Group-B	1.60	0.995	0.05	0.224	3.720	<0.001 HS
Group-C	1.85	1.04	0.10	0.308	3.792	<0.001 HS
BHRAM	Day-0		Day-30		Wilcoxon Signed Ranks Test Z	P
	Mean score	S. D	Mean score	S. D		
Group-A	2.60	1.142	0.25	0.444	3.872	<0.001 HS
Group-B	2.0	1.257	0.20	0.523	3.589	<0.001 HS
Group-C	2.75	1.164	0.35	0.587	3.879	<0.001 HS
ASAHISHNUTA	Day-0		Day-30		Wilcoxon Signed Ranks Test Z	P
	Mean score	S. D	Mean score	S. D		
Group-A	2.95	0.999	0.35	0.489	3.971	<0.001 HS
Group-B	2.50	1.147	0.40	0.503	3.861	<0.001 HS
Group-C	2.90	1.210	0.45	0.510	3.857	<0.001 HS
KATIVEDNA	Day-0		Day-30		Wilcoxon Signed Ranks Test Z	P
	Mean score	S. D	Mean score	S. D		
Group-A	2.75	1.02	0.10	0.308	3.963	<0.001 HS
Group-B	2.70	0.801	0.45	0.686	3.985	<0.001 HS
Group-C	2.80	0.834	0.40	0.681	3.983	<0.001 HS

Effect of Sammoha Loha, Navayas Loha & Mustadi Churna in Objective Criteria (Haematological Effect) of Pandu:

HB	Day-0		Day-30		Paired t	P
	Mean	S. D	Mean	S. D		
Group-A	9.605	1.173	11.330	0.894	8.239	<0.001 HS
Group-B	9.695	1.004	10.07	0.790	4.571	<0.001 HS
Group-C	9.26	1.275	9.37	1.209	3.101	0.006 Sig
RBC	Day-0		Day-30		Paired t	P
	Mean	S. D	Mean	S. D		
Group-A	3.90	0.268	4.245	0.214	6.065	<0.001 HS
Group-B	3.95	0.432	4.10	0.365	5.253	<0.001 HS
Group-C	3.98	0.253	4.01	0.255	2.042	0.055 NS
ESR	Day-0		Day-30		Paired t	P
	Mean	S. D	Mean	S. D		
Group-A	28.60	5.688	22.55	4.501	13.108	<0.001 HS
Group-B	29.65	5.556	27.80	4.808	6.525	<0.001 HS
Group-C	28.75	4.930	28.10	4.529	2.459	0.024 Sig

5. Discussion

Epidemiological Discussion

Age: On the observation of Age wise distribution of 60 patients of Pandu Roga, it was found that maximum number of patients 25 % were between the Age group of 31 – 40

years. 21.67 % were between the Age group of 51 – 60 years and 20% patients from Age group 61-70.

Discussion on the Basis of Subjective Criteria

PANDUTA: The most important presenting sign of Pandu Roga is Panduta or Palloriness where luster of the Twaka, Nakha, Netra is lost. This sign is the most conclusive sign of the disease because whenever any patient comes across, the thing first observed is the appearance. Varna and Prabha are the properties of Rakta Dhatu and Pitta Dosha, particularly the Bhrajaka and Ranjaka Pitta. It is also the property of Ojas as more and more Ojakshaya, Raktakshaya and Pitta Prakopa occurs the patients becomes Panduta appears. Regarding the effect of therapy, highly significant result seen in all Three groups Group A(P<0.001), B(P<0.001) and Group C(P<0.001) respectively. The results were found to be highly significant in all the three Groups. (P<0.001).

Akshikuta Shotha: -It was the next symptom considered in the present study. As it is not wellknown Rupa in Pandu Roga. It was found in 26 (43.76%) patients. Relief was observed in all Three Group A, B and C which was very significant. The results were found to be highly significant in all the three Groups. (P<0.001).

Agnimandya: -It was the next symptom considered in the present study. It was found in 60(100%) patients. Relief was observed in all Three Group A(P<0.001), Group B(P<0.001) and C(P<0.001) which Agnimandya was highly significantly reduced. The results were found to be highly significant in all the three Groups. (P<0.001).

Aruchi: -Aruchi was found in 56 patients (93.33%). Aruchi means Anorexia or nodesire of food intake. As the patients of Pandu Roga have also improper digestion, Anorexia is often there. In Group A (P<0.001), Group B(P<0.001) and Group C(P<0.001) highly significant result was found. The reason for good result in all Three groups may be given contain mostly Deepana, Pachana drugs. So, it helps to cure Anorexia.

AVIPAK: -Avipak was found in 34 (56.67%) patients. Relief was observed in Group A (P<0.001) which was highly significantly reduced. In Group B (P 0.004)and Group C (P 0.001) which was significantly reduced.

DAAHA: - Daahawas found in 41(68.33%) patients. Relief was observed in Group A (P<0.001) which was highly significantly reduced. In Group B (P 0.007) and Group C (P 0.001) which was significantly reduced.

DAURBALYA: -The next symptom which was Daurbalya. It was present in 39 (65%) Patients Thus, it may be concluded that this symptom is most prominent in Pandu Rogi. The reason for this may be causes the debility to Dhatukshaya, Ojakshaya as well as Raktalpta which causes the debility to do anything or in other words Daurbalya.

Regarding the effect of therapy, results were highly significant in Group A(P<0.001) and Group C (P<0.001). Result may be attributed to Shamana of Pitta Dosha to a greater extent by Sammoha Loha and Navayas Lohathese compounds has also Rasayana properties which is necessity for Dhatukshayaja Vikaras. In Group B(P 0.002) relief was observed significant which was statistically.

Saktivedna-Kativedna-Paadvedna: It may be due to some change in Muscular tissue metabolism or due to Weakness. Another reason is again vitiated Vata due to Dhatukshaya. Saktivedna 50 (83.33%) and Kativedna 37(61.67%) was noted in patients. In Lakshan Saktivedna and Kativedna though the results were statistically highly significant in all Three Groups (P<0.001). In Lakshan Paadvedna the results were statistically highly significant in Group B (P<0.001) and Group C (P<0.001). In Group A it was statistically significant. The reason for maximum relief in trial compounds mayagain be attributed to the Rasayana drugs present in it, especially Amalaki.

BHRAMA: -Bhrama was found in 54 (90.00%) patients showing that it is also a very common presenting symptom. Maximum relief was observed in all Three Groups. In Group A (P<0.001), Group B (P<0.001) and Group C (P<0.001) which was highly significant.

SHRAM-SHWAS: -Dyspnea on exertion or Shwas in Pandu is due to lack of proper nourishment and Raktalpata due to which Respiratory organs have to work quickly so as

to provide rapid blood flow to body tissues and that is the reason of Shwas.

Shwas was in 38 (68.33%) patients,so this can be also taken as a common symptom. The relief was good In Group A (P<0.001) which is statistically highly significant. In Group B (P 0.003) and Group C (P 0.001) significant result was observed.

The reason for good result in Group A may be given as It has Pippali, Amalaki and Madhu which are known drug as Shwashara and Kaphavata Nashana and due to Ashukarivam, it gets quickly absorbed in Srotasa. It also worked as Rasayan.

Haematological Effect: Haematological values which considered to see the effect of drug in case of Pandu Roga were Hb gm %, Total R.B.C. count/mm., and ESR. Haemoglobin percentage was the most important investigation which gave us idea about Anaemia. In the present study all the cases were examined for Hb. gm% before treatment and after the treatment. After treatment, trial drug was found to be effective in increasing the Hb gms %. Statistically analysis was carried out, effect of drug was highly significant for this investigation. Effect of drug for all other investigations carried out before and after treatment to assess the effect of drug was found encouraging and statistically analysis was highly significant for all investigation.

Haemoglobin: In present study Maximum number of 60 (100%) patients were having Hb% decreased below normal value. In Group A (P<0.001) and Group B (P<0.001) relief were observed in Haemoglobin percentage, which is statistically highly significant result. Whereas in Group C (P 0.006) relief were observed in Haemoglobin percentage statistically significant. So, we might be concluded that comparatively Group A shows good result in this Investigation statistically and Group C shows encouraging result in percentage of relief.

RBC: Total Red Blood Cell count is important investigation in case of Anaemia. Here in Group A (P<0.001) and Group B (P<0.001) relief were observed in RBCs Percentage which is statistically highly significant result. Whereas in Group C (P 0.055) relief were observed in RBCs percentage, which seems statistically non-significant observed. So, we might be concluded that comparatively Group A and Group B shows good result in this Investigation statistically and Group C shows encouraging result in percentage of relief.

ESR: Erythrocyte Sedimentation Rate is very important investigation among allHaematological Investigations. Group A (P<0.001) and Group B (P<0.001) relief were observed in ESR percentage. This is statistically highly significant result. Whereas in Group C (P 0.024) relief were observed in ESR percentage which isStatistically significant. In Control So, we might be concluding Group A and Group B show good result in this Investigation statistically

Mode of Action

Sammoha Loha, Mustaadi Churna and Navayas Loha were selected, which contains Amalaki, Haritaki,

Bibhitaki, Chitrak, Pippali, Guduchi, Shunthi, Vidanga etc. Most of the Drugs in this have Rasayana, Deepana, Pachana, Raktavardhaka etc. properties. As the disease is concerned with the involvement of Dhatu Rasa and Rakta, there is Uttrottara Dhatukshaya in the disease. Moreover, the Rasayana also regulates the metabolism and gives immunity and strength.

6. Conclusion & Summary

Comparison of effect of Therapies

Group A: In patients treated with Sammoha Loha highly significant relief was observed in symptoms Panduta (Nakha, Netra, Twaka), Agnimandya, Daurbalya Aruchi, Avipak, Akshikuta shotha, Daaha, Trushna, Shram-Shwas, Saktivedna Bhram, Kativedna, Hb%, RBC and ESR. Significant improvement was found in symptoms Paavedna.

Group B: In patients treated with Mustaadi Churna Highly significant result were found in Agnimandya, Panduta (Nakha, Netra, Twaka), Akshikuta shotha, Aruchi Daurbalya, Saktivedna, Paadvedna, Bhrama and Kativedna. Hb%, RBC, ESR. Whereas significant result were found in Avipak, Daaha, Daurbalya, Trushna, Shram-shwas, Ashishnuta.

Group C: In patients treated with Navayas Loha Highly significant result were found in Agnimandya, Panduta (Nakha, Netra), Akshikuta shotha, Aruchi, Trushna, Saktivedna, Paadvedna, Bhrama, Kativedna. Whereas significant result was found in Avipak, Daaha, Daurbalya, Shram-shwas, Hb%, ESR, RBC.

- 1) No any adverse and toxic effect of the drug was observed during the clinical study.
- 2) The clinical and haematological assessment was made before and after the study. In this study was observed and analyzed. The effect of Loha kalpas is statistically significant. The Haemoglobin concentration raised significantly and response of clinical features of Pandu to the drug is good. So Sammoha Loha, Mustaadi Churna and Navayas Loha are effective in the management of the Pandu Vyadhi w.s.r. Anaemia

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Author Profile

Dr. Sanjay A. Dhurve M.D., PhD. Flat Number 6, Building number 1, Salokha Housing Society, Near BSNL Office, Near Panchami Hotel, Shahu College Road, Parvati darshan, Pune-411009, Maharashtra India Email-dr.sanjaydhurve@gmail.com Contact Number 9850044207