WORLD JOURNAL OF PHARMACEUTICAL RESEARCH
SJIF Impact Factor 8.453
Volume 14, Issue 04, 937-952. Research Article ISSN 2277–7105

A CLINICAL STUDY TO EVALUATE THE EFFICACY OF HARIDRADI CHURNA IN THE MANAGEMENT OF KAPHAJA PANDU W.S.R TO ANEMIA

Netravati S. Teggin[1]*, K. R. Neha[2], Jayanthi C.[3] and Mukta M. H.[4]

[1,2]PG Scholar, Department of Kayachikitsa, Ashwini Ayurvedic Medical College and P. G. Centre Davanagere, Karnataka, India.

[3]Professor and Guide Department of Kayachikitsa, Ashwini Ayurvedic Medical College and P. G. Centre Davanagere, Karnataka, India.

[4] Principal and HOD Department of Kayachikitsa, Ashwini Ayurvedic Medical College and P. G. Centre Davanagere, Karnataka, India.

Article Received on
27 December 2024,

Revised on 17 Jan. 2025,
Accepted on 07 Feb. 2025

DOI: 10.20959/wjpr20254-35579

***Corresponding Author**
Dr. Netravati S. Teggin
PG Scholar, Department of Kayachikitsa, Ashwini Ayurvedic Medical College and P. G. Centre Davanagere, Karnataka, India.

ABSTRACT

Pandu is one of the most common illness that people face and it is a Clinical condition mentioned in Ayurveda. *Kaphaja Pandu* is type of pandu where *kapha dosha* is predominant. along with *pitta i*s also involved. Along with *Pandutva, kaphaja* symptoms are *Gouravata, Shwetavarnata* of twak *nakha mutra pureesha, Bhrama, Klama, Tandra, Alasya. madhuraasya, Hritdrava, Aruchi, Sada, Praseka, Murcha*. Which indicates *kapha dusti*. In General Pandu is coorelated with Anemia. Treatment mentioned in ayurveda for kaphaja pandu *is ushna tikshna aoushada, katu tikta rasa* drugs are told. Hence the taken formulation *Haridardi Churna* was taken.

KEYWORDS:- *Kaphaja pandu, Haridradi churna.*

INTRODUCTION

Ayurveda is an ancient science and *Upaveda* of *Atharvaveda* .Ayu means Longetivity of life and veda means knowledge, so Ayurveda means the scientific study of life, Ayurveda deals with *Swasthasya swasthya Rakshanam Aturasya Vikara Prashanam*[1] to maintain the health of healthy individuals and to cure the ailments. One should maintain the health by following *Dinacharya* (Daily regimen), *Rutucharya (*Seasonal regimen), *Aharavidhi vidhana* (Types of diet etc). Ayurveda

Emphasizes that Blood is life and it has been considered as a key factor of *Jeevana. Poshana, Dharana*[2] *karma* of body. *Rakta* is the essence of life. Majority of peoples due to their Mechnaical life style, food habits, illiteracy, stressful life causing *Pandu Roga*. Its a Major global public health problem, and the most prevalent nutritional deficiency disorder in the world.

Pandu is the one of the most common illness that people face and it is clinical condition mentioned in Ayurveda with a skin manifestation of "*Kethaki Dhuli Sannibha"*[3] that is whitish yellow. A prominent diagnostic feature of *Pandu roga* is the Pallor on the skin which occurs due to the quantitative and qualitative defisciency of *Rakta dhatu* that is *Alparaktata.*

Kaphaja Pandu is a type of p*andu* where *lakshanas* of *kapha dosha* is predominant. *Pandu* is a *pitta pradhhana vyadhi*, in all types of *pandu piita dosha* is involved and it's a main contributing factor in samprapti of pandu.here due *to nidana sevana vridha kapha* does *dushana of raktadi dhatu and pitta dosha, this dhooshita raktadi dhatu and vridha kapha* taken by *vata* in different part of body and ultimately leads *to Kaphaja pandu.*

In modern *Pandu* is correlated as Anaemia,is a condition that occurs when Haemoglobin concentration in blood below the low limit of normal range for the age and sex of individuals.

According to the recently released data for the complete 5th round of the National family health survey, prompting the Government to take a hard task.[4] Anemia Mukt Bharaath Program. was launched in 2018 it focuses on prophylactic iron folic acid supplementation, identification of anemic cases and their referral treatment in addition to improving nutrition. The problem of nourishment is existing in most of the developing and underdeveloped countries. The population is overwhelmingly Anemic with 57% anemic female and 25% male prevalence. Asa developing country India poses poor nutrition, worm infestations, more demand of nutrition in adolescence etc along with hemorrhage and chronic disorders, stress and life style altogether creates the entity.

In *Chikitsa* of *Pandu roga* much yogas are explained, one among these is *Haridradi Churna.* It contains drug which are mainly Tri*dosha*hara which breaks the *Samprapti* and also corrects the *agni* intern cures the *rasa* pradushti. The proper action of *dosha*s and *agni* helps in absorption of nutrients, the *dhatu*s along with *bala*, *varna*, sneha and *ojas* get pushti. The

polyherbal formulations which selected for the study acts very in the overall health of the the subjectsthan that of single iron drugs. As the modern system of health treat the disease with some ferrous compound which having some acceptedsideeffects.

OBJECTIVES

1) To review the literature of *Pandu Roga* and Iron deficiency Anemia.
2) To evaluate the efficacy of *Haridradi Churna* in *kaphaja Pandu* W.S.R to Iron deficiency Anemia.

Source of data

Clinical data

Subjects of either sex attending the OPD and IPD of Ashwini Ayurvedic Medical College and Hospital, Davanagere were selected for the study. Also subjects are selected from medical camps conducted under the college. Patients were selectd consisting of 40 subjects using simple randomization. Complete details of the clinical trail and rights of the participants were explained and informed consent was obtained from each participant or guardians of them from the Institutional Ethical Committee clearance has been obtained for the study.

Method of preparation

1. Preparation of *haridardi churna*.[5]

Ingredients of *haridradi choorna*

Sl No	Drug	Botanical name	Part used	Quantity
1	*Amalaki*	Emblica Officinalis	Fruit	90 gm
2	*Hareetaki*	Terminalia chebula	Fruit	90 gm
3	*Vibheetaki*	Terminalia Beliria	Fruit	90 gm
4	*Haridra*	Curcula longa	Rhizome	90 gm

All the ingredients are collected, dried and stored .The moisture conent where reduced to 5% and the ingredients were individually pulverized using pulverisers and pass through mesh size of 85. Ingredients were homogenously mixed using blender and collected in air tight container.

The *Sukshma choorna* Packets were made by weighing 360 Gms per packets.

- **A** Minimum of 40 patients suffering from Pandu roga will be selected.


AMALAKI
HAREETAKI
VIBHEETAKI
HARIDRA
VIBHEETAKI CHURNA
HARIDRA CHURNA
AMALAKI CHURNA
HAREETAKI CHURNA
HARIDRADI CHURNA

Inclusion criteria

- Patients of either sex with age group between 18 to 50 years.
- Patients showing classical signs and symptoms of Pandu roga W.S.R Anemia.
- Hb% below normal range (in Men 8-13 gm/dl and in female 8-12gm/dl).

Exclusion criteria

- Patients having Systemic and Infectious Diseases.
- Patients with Genetic, Congenital, Acute blood loss, Hemolytic disorders and Aplastic anemia, Thalasssemia, Sideroblastic anaemia, Anaemia associated with Liver cirrhosis, ALD, CCF. Immuno compromised patients. Pregnant and lactating mother

Interventions

	Group A
Sample Size	40
Medicine	*Haridradi Churna*
Dose	6gm (1tsf) twice daily with honey after food
Duration	3 Months
Follow up	After 1 month(30^{th},60^{th},90^{th} day from started day)

Subjective parameters

Gourava, Shwetavarnata, Bhrama, Klama, Tnadra. Alasya, Hritdrava, Praseka, S hwayathu, Saada, Murcha. Madhura Aasya, Aruchi.

Laboratory investigations

Following laboratory blood investigations was used in the study Hb%, MCH, MCV, PCV, MCHC, ESR for diagnosis and assessment of Iron deficiency anemia.

RESULTS

Gourava	**Score**	**Number of Patients**			
		BT	**AT**		
			30^{th} day	**60^{th} day**	**90^{th} day**
No Heaviness of the body	0	05	09	19	25
Occasional Feeling of heaviness of the body	1	21	18	18	12
Persistant Feeling of heaviness of body but not affecting the work	2	14	13	03	03
Persistant Feeling of Heaviness of the body affecting the work	3	00	00	00	00

Saada	Score	Number of Patients			
		BT	AT		
			30th day	60th day	90th day
No Fatigue	0	00	03	15	26
Little fatigue in doing hard work	1	19	19	23	13
Moderate fatigue in doing routine work	2	17	16	02	01
Excessive fatigue in doing routine work	3	04	02	00	00
Excessive fatigue even in doing little work	4	00	00	00	00

Shweta varnata	Score	Number of patients			
		BT	AT		
			30th day	60th day	90th day
No Discolouration	0	03	06	15	20
Shweta varnata of aksha	1	16	16	21	16
Shweta varnata of aksha, mukha, nakha	2	17	15	04	04
Shweta varnata of aksha, mukha, nakha, twacha	3	04	03	00	00
Shweta varnata of aksha, mukha, nakha, twacha, mutra, varcha	4	00	00	00	00

Murcha	Score	Number of Patients			
		BT	AT		
			30th day	60th day	90th day
No syncope	0	34	37	39	40
Got Syncope once recently	1	06	03	01	00
2 times recently	2	00	00	00	00
More than 2 episodes	3	00	00	00	00

Bhrama	Score	Number of Patients			
		BT	AT		
			30th day	60th day	90th day
No Giddiness	0	01	08	17	24
Occasionaly present once or twice a week	1	30	23	20	14
Frequently present in 1to 2 days	2	09	09	03	02
Persistant	3	00	00	00	00

Shwasa	Score	Number of Patients			
		BT	AT		
			30th day	60th day	90th day
No Dyspnea	0	18	26	35	38
Dyspnea after heavy work relieves soon, tolerable	1	18	11	05	02
Dyspnea after moderate work relieves soon, tolerable	2	04	03	00	00
Dyspnea after light work relieved later, tolerable	3	00	00	00	00
Dyspnea after light work, intolerable	4	00	00	00	00

Alasya	Score	Number of Patients			
		BT	AT		
			30th day	60th day	90th day
No laziness	0	03	06	26	35
Mild laziness to do work	1	30	27	14	05
Moderate laziness to do work	2	07	07	00	00
Severe laziness to do work	3	00	00	00	00

Aruchi	Score	Number of Patients			
		BT	AT		
			30th day	60th day	90th day
No Anorexia	0	10	11	32	37
Eat food only 2 times a day without any snacks in between	1	28	27	08	03
Eat only once	2	02	02	00	00
Have no feeling of apetite	3	00	00	00	00

Shwayatu	Score	Number of Patients			
		BT	AT		
			30th day	60th day	90th day
No oedema	0	35	37	38	40
Oedema of akshi koota	1	05	03	02	00
Oedema of akshikoota and mukha	2	00	00	00	00
Oedema of akshikoota mukha pada and pani	3	00	00	00	00
Oedema of whole shareera	4	00	00	00	00

Madhura Aasya	Score	Number of Patients			
		BT	AT		
			30th day	60th day	90th day
Normal taste of mouth	0	09	21	32	37
Occasional sensation of unpleasant sweet taste	1	31	19	08	03
Continuos sensation of sweet taste but vanishes after eating something	2	00	00	00	00
Continuos mild sensation of sweet taste which persists even after eating	3	00	00	00	00
Severe unpleasant sweet taste through out the day	4	00	00	00	00

Hritdrava	Scor e	Number of Patients			
		BT	AT		
			30th day	60th day	90th day
No Palpitation	0	08	09	22	30
Palpitation on heavy exertion relieved soon and tolerated	1	21	20	17	09
After moderate work but relieved after that and tolerated	2	11	11	01	01
After little work but relieved after that and	3	00	00	00	00

tolerated					
After little work but relieved after that and not tolerated	4	00	00	00	00

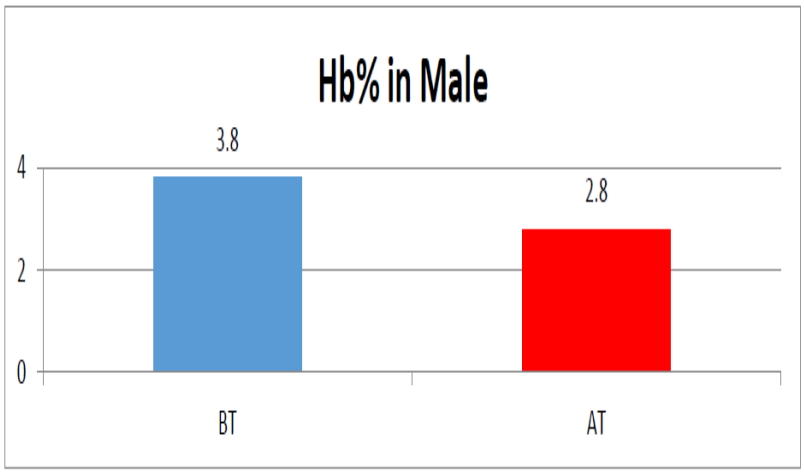
Tandra	Score	Number of Patients			
		BT	AT		
			30th day	60th day	90th day
No Drowsiness	0	01	20	26	36
Mild drowsiness not affect to daily work	1	38	18	14	04
Moderate drowsiness not affect to daily work	2	02	02	00	00
Severe drowsiness affect the daily work	3	00	00	00	00

Praseka	Score	Number of Patients			
		BT	AT		
			30th day	60th day	90th day
No excessive salivation	0	17	28	32	38
Mild	1	23	12	08	02
Moderate	2	00	00	00	00
Severe	3	00	00	00	00

RESULTS ON OBJECTIVE PARAMETERS

HB in male

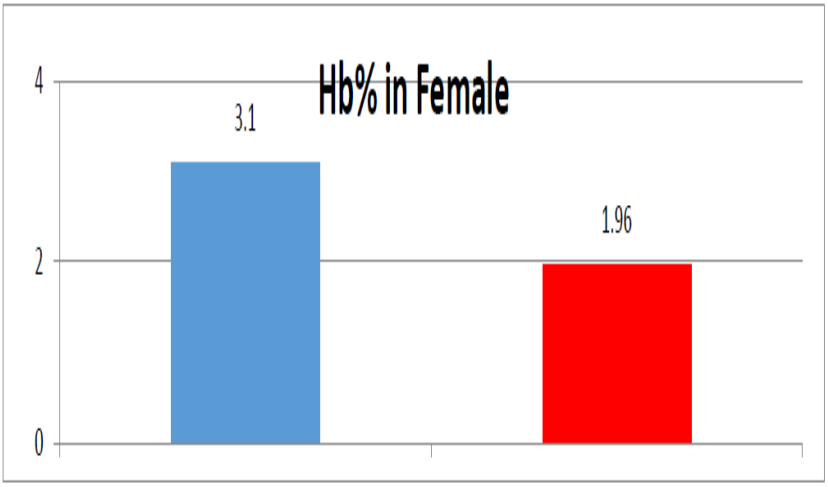
In this work of 10 male patients studied in Kaphaja Pandu statistical analysis shows that the mean score which was 2.06 before the treatment was reduced to 1.5 after the treatment with 53.39% improvement and it is statistically highly significant with T test ($p<0.001$).



HB in female

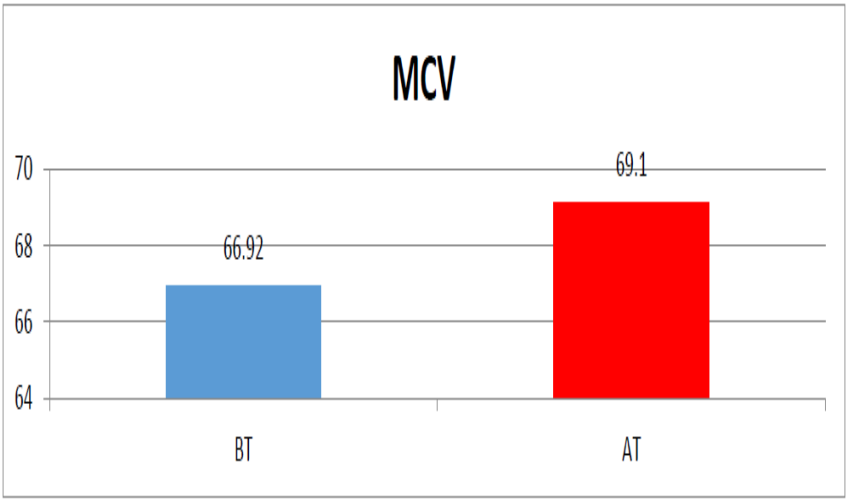
In this work of 30 female patients studied in Kaphaja Pandu statistical analysis shows that the mean score which was 2.06 before the treatment was reduced to 1.5 after the treatment with

53.39% improvement and it is statistically highly significant with T test (p<0.001).



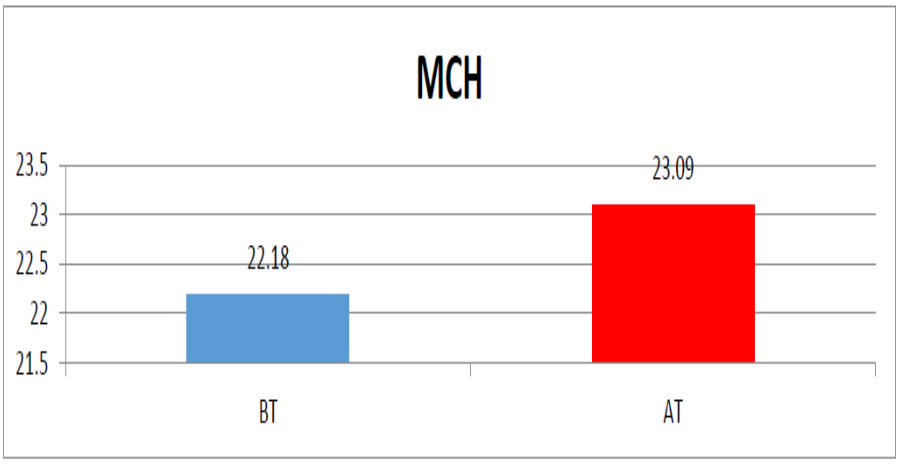
MCV

In this work of 40 patients studied in Kaphaja Pandu statistical analysis shows that the mean score which was 66.92 before the treatment was reduced to 69.1 after the treatment with 3.25% improvement and it is statistically highly significant with T test (p<0.001).



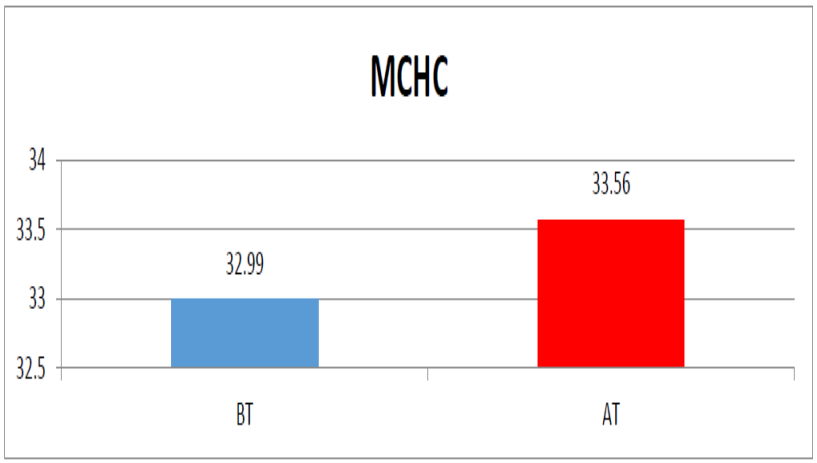
MCH

In this work of 40 patients studied in Kaphaja Pandu statistical analysis shows that the mean score which was 22.18 before the treatment was reduced to 23.09 after the treatment with 4.1% improvement and it is statistically highly significant with T test (p<0.001).



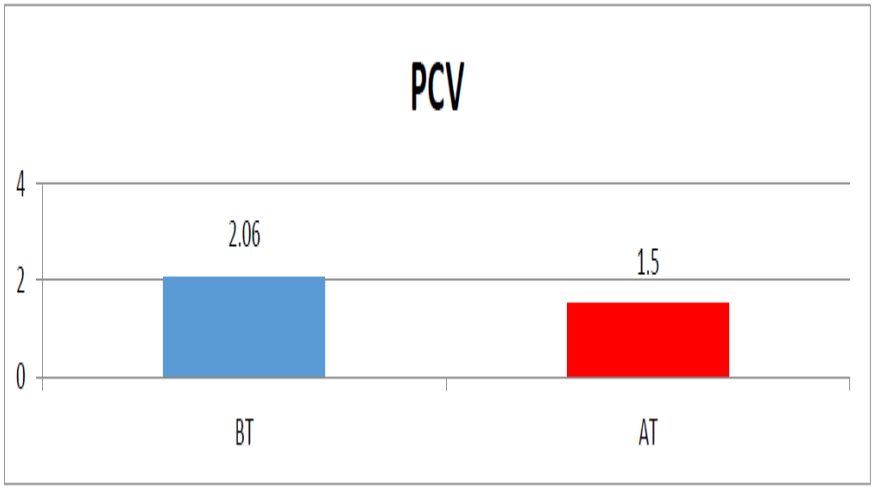
MCHC

In this work of 40 patients studied in Kaphaja Pandu statistical analysis shows that the mean score which was 32.09 before the treatment was reduced to 33.56 after the treatment with 1.69% improvement and it is statistically highly significant with T test ($p<0.001$).



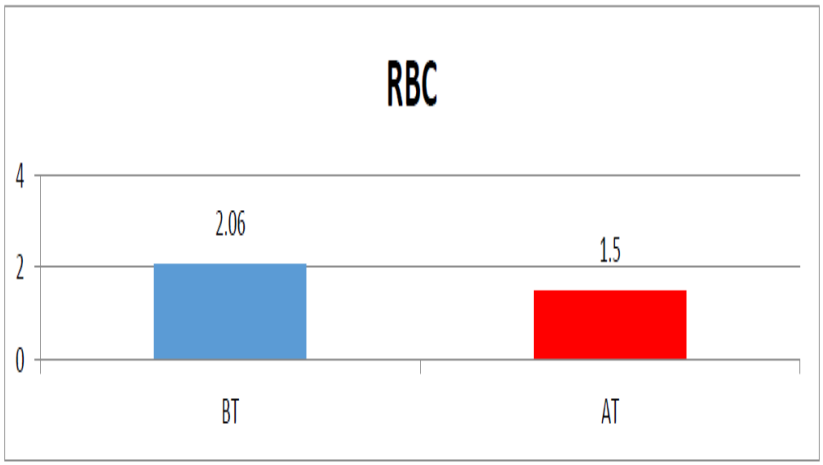
PCV

In this work of 40 patients studied in Kaphaja Pandu statistical analysis shows that the mean score which was 28.56before the treatment was reduced to 30.51 after the treatment with 6.799% improvement and it is statistically highly significant with T test ($p<0.001$).



RBC

In this work of 40 patients studied in Kaphaja Pandu statistical analysis shows that the mean score which was 3.98 before the treatment was reduced to 4.38 after the treatment with 9.79% improvement and it is statistically highly significant with T test ($p<0.001$).



Overall result of the treatment on kaphaja pandu

Parameter	Mean		% impr.	SD	T-Value	P-Value	Remarks
Gourava	BT	1.225	63.26	0.47	10.21	<0.001	HS
	AT	0.45					
Shweta Varnata	BT	1.525	63.93	0.47	12.85	<0.001	HS
	AT	0.55					
Saada	BT	1.625	76.92	0.49	16.01	<0.001	HS
	AT	0.375					
Bhrama	BT	1.2	62.5	0.43	10.81	<0.001	HS
	AT	0.45					
Klama	BT	1.325	69.81	0.52	11.13	<0.001	HS
	AT	0.4					

Shwasa	BT	0.675	92.59	.58	6.74	<0.001	HS
	AT	0.05					
Alasya	BT	1.1	86.36	.38	15.44	<0.001	HS
	AT	0.15					
Aruchi	BT	0.8	90.62	.55	8.27	<0.001	HS
	AT	0.075					
Murcha	BT	0.15	100	.36	2.62	<0.05	S
	AT	0					
Hritdrava	BT	1.05	73.8	.57	8.49	<0.001	HS
	AT	0.275					
Shwayathu	BT	0.125	100	.33	2.36	<0.05	S
	AT	0					
Tandra	BT	1.025	90.24	.26	21.9	<0.001	HS
Madhura Aasya	BT	0.775	90.32	.46	9.53	<0.001	HS
	AT	0.075					
Praseka	BT	0.575	91.3	.50	6.56	<0.001	HS
	AT	0.05					
Hb% in Male Patients	BT	3.8	26.31	.47	6.7	<0.001	HS
	AT	2.8					
Hb% in Female Patients	BT	3.1	36.45	.34	17.95	<0.001	HS
	AT	1.96					
MCV	BT	66.92	3.25	2.62	5.24	<0.001	HS
	AT	69.1					
MCH	BT	22.18	4.1	.65	8.82	<0.001	HS
	AT	23.09					
MCHC	BT	32.99	1.69	.78	4.51	<0.001	HS
	AT	33.56					
PCV	BT	28.56	6.79	.81	15	<0.001	HS
	AT	30.51					
RBC	BT	3.98	9.79	.36	6.8	<0.001	HS
	AT	4.38					
ESR	BT	17.05	5.71	2.17	2.83	<0.01	HS
	AT	16.07					

From the above statistical analysis it is very clear that all the assessment parameters responded very well. The Haridradi Churna is having highly significant effect on all the parameters of Kaphaja Pandu with p value <0.001. the average improvement was 56.62%.

Discussion on probable action of medicines

Mode of action in *shweta varnata*: *Panduharaguna* of *Amalaki, haridra* and *Hareetaki, Yakrit* protective property of *amalaki, haridra, hareetaki* might possibly have helped in regulating the hemoglobin level in the blood.[6] As the moolasthana of *raktavahasrotas* is *yakrit*. Pallor in Iron deficiency anemia occurs due to the diminished oxygen carrying capacity of the blood due to reduced hemoglobin. As the Hb% has improved the pallor has

reduced considerably. And *Deeepana pachana* effect of *Amalaki hareetaki vibheetaki* corrects the *agni,lekhana* effect of *haridra* clears the *sroto avaradho* hence absorption of nutrients taken palce and *uttarottara dhatu vridd*taken place, *amalaki* contains vit c helps to absorption of iron.

Mode of action on saada: Saada is fatigue of the body. Dhathu Kshaya and Vatavridhi is the main reason for the cause of *saada*. *Rasa and rakta* are does the function of *preenana, jeevana*, are impaired in *pandu roga* leading to saada. *Tridoshahara and Rasayana* properties of *amalaki hareetaki, vibheetaki, haridra.* Weakness or fatigue in Iron deficiency is due to the absence of oxygen supply to the tissues and muscles. The consecutive rise in Hb automatically corrects the issue .this is corrected by improving thex Hb level by administarting *Haridradi churna.*

Mode of action on *shwasa* – *Shwasa*hara action of *amalaki, hareetaki, vibheetaki and haridra* and *Kaphahara* properties might act well on the scenario[7] Decreased availability of oxygen on working muscles is been rectified with dynamic dilatation property of the drugs.

Mode of action on *gourava*-*Gourava*** is due to *ama*, for *ama* condition *deepana pachana* should be done, the selected drugs *amalaki, hareetaki*, *vibheetaki* have *deepana pachana* properties hence *gouravata r*educed.

Mode of action on *hrudrava* – *Hrudrava* is increased gati by *hrudaya*. Here *vyanavayu* get agggrevated with *chalaguna*. Hrudaya is the *vyanavatasthana* performs *rasa samvahana* and *asriksarana.*[8] So we can see *hrutpeeda* in *rasa ksyaya* also and the sthana of *rasa* is *Hrudaya.*[191] *Rasavahasrotodushti* itself is *Panduroga*. The *Chikitsa* for *rasa*pradushti is *amapachana* or *agnivardhana*. *Amalaki, hareetaki, vibheetaki* improves the *agni* which might act on the purification and improvement of *rasa*. *Amalaki, hareetaki, vibheetaki* have cardioprotective properties may also act. As the heart has to work extra hard to carry oxygen in Anemia and drugs will improvise effect and circulatory system to work property.

Mode of action on *bhrama*: *Bhrama* is a condition which is caused due to the vitiation of *vata* and *pitta.*[04] dhtaukshaya. Tridosha hara property of Triphala reduces the symptoms of *bhrama*. Low level of haemoglobin prevents adequate oxygen from reaching the brain. Blood vessels swell, blood presence drops and result vertigo.

Mode of action on *Aruchi, alasya, Tandra, Praseka, aasya vairasya:* Are due to *amaja* condtiton *kapha vriddhi. Deepana pachana* effects *kaphahara p*ropertgies *of Amalaki hareetaki, vibheetaki*, pacifies the condition.

Mode of action on *murcha*: Murcha due to decresed oxygen supply to brain. due to *pitta dosha*, the *tri dosha hara* properties of *amalaki hareetaki vibheetaki* helps to reduce the condition.

Mode of action on *shwayathu*: Accumulation of *Kapha*. *pitta* in between *twak and mamsa* due to v*ata* causes *shoth*a, due to *ama*, for this *deepana paachana* should be done. in anemia due to decreased protein that is haemoglobin in serum concentration. by the effect of *panduhara* properties of *amalaki hareetaki vibheetaki haridra* and *shothahara* effect of *Hareetaki* and *haridra* haemoglobin coreection reverse the condition.

Mode of action on Hb%, PCV, MCV, MCH, MCHC: It is found that *Haridradi Churna* significantly increased the Hb % and RBC as well as other red blood indices PCV, MCV, MCH, MCHC as observed in the clinical study.

Effect of amalaki on kaphaja pandu roga

Amalaki is also a potent source of Vitamain C Which is the most potent enhancer of non heme iron absorption, adding vitamin c source to a meal, increases non heme iron absorption. up to 6 fold which makes the absorption of non heme iron as good as or better than that of heme iron, further, ascorbic acid facillitates iron absorption by forming a chelate with ferric iron at acid ph that remains soluble at the alkaline ph of the duodenum. Amalaki is also having antioxidants present in it which include vitamin c, bioflavonoids, flavones, polyphenols, carotenoids. As oxidative stress, an increse in oxidants and decrese in antioxidant capacity is one of the potential biochemical mechanisms involved in the pathogenesis of IDA.

Effect of haridra

Owing to its hepatoprotective effect, maintains normal function of *Yakrita* (Liver) to convert *Rasa* into *Rakta* and thus produce excellent quality of R*akta Dhatu* (blood). By virtue of Appetizer, Digestive, Hepatoprotective, Cholagogue activity of *Haridra*, it improves digestion and metabolism, ultimately absorption of nutrition. As curcuma longa is proved as antioxidant, it has been found to be a very good immune enhancer. It improves general

health, immunity, vigor and luster of the skin etc. in patients having anemia. Moreover, Iron deficiency anemia can be overcome through turmeric rich in iron which are essential components in the formation of red blood cells.Experimental data suggests that curcumin acts as antioxidant and hepatoprotective which may beneficial in treating patients of anemia with compromised liver and decreased immunity. Various clinical research works have also proved the role of *Haridra* in *Pandu* (Anemia). Thus, it can be concluded that, *Haridra* may play an important role in the treatmentof Anemia.

Probable mode of action based on *rasa* panchaka

Probable mode of action based on the *rasa*

The drug combination of *Haridradi churna* is *katu, Tikta kashaya, Madhua, Amla* pancha *rasa*. In whole the dominant *rasa* of *churna*s are *k a t u, Tikta, Kashaya*. The *rasa* will break the *samprapti* of *Ama*, *kapha* dushti and *kapha srotorodha*.[a]

Probable action based on *guna*

The drugs are dominant of *laghu ruksha guna* which does the decrease of snigdha property in *pitta*, *srotorodha* and *kapha*haratwa.

Probable action based on *veerya*

The drugs are *Ushna veerya do Kaphahara effect except amalaki*.

Probable mode of action based on *vipaka*

The yogas are dominant of *madhura vipaka* which helps to restore the strength by acts as Rasayana.

Probable mode of action based on *Karma*

Tridoshashamaka, hrudya, balya, ruchya, kaphgna, rasayana, yakrutt uttejaka, anulomaka, deepana, pachana, shothahara, krimighna, srotoshodhana, dhatuvardhaka, shwasa kasagna, vishodini, panduharatva properties effect *in Kaphaja pandu roga.*

CONCLUSION

The present research work was mainly aimed to explore the disease kaphaja Pandu W.S.R. to lron deficiency Anemia and evaluate the effect of Haridradi churna in the management of Kaphaja *Pandu* W.S.R. to IDA. From the detailed conceptual compilation, critical review, clinical observations and discussion the following conclusion are evolved.*Pandu roga* type here can be assessed as Iron Deficiency Anemia because of the

similarities in respect to etiology, pathogenesis, clinical features and prognosis.According to statistics under the beneficiaries of Anemia Mukth Bharath campaign 57% females are anemic and males 25% . 31.1% in adolescent boys, 59.1% in adolescent girls, 52.2% in pregnant women and 67.1% in children. *Panduroga* is a *rasa-rakta* Janya Vyadhi due to the *Kaphaja Nidana* Most of the patients were having *Madhura Katu-amla, lavana, rasa* foods more. Iron deficiency anemia noted mostly due to negligence of the people towards the health, low socioeconomic status, unawareness, low absorption due to stress, habits etc., The chikitsa includes katu tikta kashaya ushna, Ushnaveerya, Agni vardhaka Tridoshahara .Its fulfilled by Haridardi churna. The clinical trail to 40 patients showed significant relief in subjective and objective parameters.

REFERENCES

1. Acharya Agnivesha, Charaka Samhita, Ayurveda Deepika Teeka of Chakrapanidatta, Sutra Sthana, Chapter, Verse no, edited by Vaidya Yadavji Trikamji Acharya, Chaukambha Surabharati Prakashana, Varanasi, 2019; 187: 30-26.
2. Sushruta Samhita, Ayurved Tatvasandipika hindi commentary Dr. Ambika DuttaShastri Chaukhambha Sanskrit Sansthan, Varanasi, Sutra Sthana, 14-44.
3. Shukla Vidyadara, Tripathi Ravidatta charaka samhita by Agnivesha Prathama bhaga, Delhi Choukambha Sanskrit Pratishatana chapter, 28: 9-429.
4. https://anemiamuktbharat.info
5. Srikantha Murthy K R Sushrutha Samhita Chaukhambha Orientalia Varanasi, Volume Th Uttratantra, 44, 17: 3-288.
6. Bhavamishra, Bhavapraksha Nighantu by Vishwanth Dwivedi Shstry Guduchyadi varga New delhi.
7. Bhavamishra, Bhavapraksha Nighantu by Vishwanth Dwivedi Shstry Guduchyadi varga New delhi.
8. Vagbhata Astanga Hridaya, Prof Srikantha murthy Su Chp, Choukamba Orientalia, 2007; 167: 12-6.