

CLINICAL STUDY ON EFFICACY OF MANDUR VATAK IN MANAGEMENT OF PANDU ROGA

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ABSTRACT

Pandu roga is more common disease in India so it's given much importance to its treatment. *Ayurveda* is one of the most ancient system of health and life. The basic and applied knowledge of *Ayurveda* has survived to the present times through its various branches like *Roganidana*, *Kayachikitsa*, *Dravyaguna*, *Rasashastra*, etc. *Rasashastra*, which starts with a pledge to render a happy, healthy and prosperous life can be considered as an advanced stage of Indian system of medicine. According to *Charka*, the conditions which are marked by body discoloration from reddish to greenish, yellowish, whitish tinge. The most predominant and common sign in all these conditions being that of the *Panduata* the disease is termed as '*Pandu roga*'. In modern time deficiency of iron in the blood called anaemia

and its main etiological factor is malnutrition. This is the reason that *Ayurveda* not only advocated to maintain iron level in body but it also support to regulate digestive system to manage *Pandu roga*. Iron rich food and medicines is very helpful in management of *Pandu roga*. In *Ayurveda* many single and compound drugs are available to manage *Pandu roga*. *Mandur vatak* is easily ingestible and rapid iron increasing drug of *Ayurveda*. 60 patients of *Pandu roga* are selected and treated with *Mandur vatak*. Symptoms and haemoglobin level are monitored before and after the treatment. So researcher selected a single group study "**Clinical study on efficacy of *Mandur vatak* in management of *Pandu roga*.**"

KEY WORDS: *Pandu roga*, *Panduta*, *Kostha*, *Mandur vatak* and *Anaemia*.

INTRODUCTION

Ayurveda is one of the most ancient system of health and life. Its antiquity goes beyond to the *Vedas*. It is a highly evolved and codified system of life and health science based on its own unique and original concepts and fundamental principles.^[1] The basic and applied knowledge of *Ayurveda* has survived to the present times through its various branches like *Roganidana*, *Kayachikitsa*, *Dravyaguna*, *Rasashastra*, etc. *Rasashastra*, which starts with a pledge to render a happy, healthy and prosperous life can be considered as an advanced stage of Indian system of medicine.^[2] *Pandu roga* (*Anaemia*) is one of the commonest and important disease of mankind in current days. *Vedas* had important references of this disease. Many Children, adult and females suffers from this malady, large number of these patients could be easily and cheaply treated with single oral iron preparation, that are available in *Ayurvedic* classical books.^[3] These preparations are used in our country since the days of *Charaka* and *Sushruta*. But before *Charaka's* period we get reference of *Pandu roga* in *Rigveda* and *Atharvaveda* like '*Halima*' and '*Haribha*'.^[4] World's other traditions of medicine like Roman, Greek, Egyptian, Mesopotamian we get references of *Pandu*.^[5]

Coming to *Charaka*, the author making specific classification of these conditions which are marked by body discoloration from reddish to greenish, yellowish, whitish tinge. The most predominant and common sign in all these conditions being that of the *panduata* the disease is termed as '*Pandu roga*'.^[6]

Ayurveda emphasizes that "***Raktam Jivamiti Smrutam***"- which means "**The blood is life**". Further it also emphasize the role of iron in the formation of *Rakta dhatu* in the body.^[7] This is the evident from the fact that *Ayurveda* has quoted the word **LOHITAM** –as synonym of *Rakta dhatu*. The word *lohitam* means the one that contains i.e. iron.^[8] Therefore *Ayurveda* stressed not only the significance of early treatment of *Pandu roga* but also significance of use of element iron in its treatment.^[9] In *Charaka* and *Sushruta* so many iron preparations are available for the treatment of *Pandu*, In the field of *Ayurvedic* research various scholars individually or collectively studied *Pandu roga* with different angles and different preparations, even *Mandur bhasma* is used for *pandu* but there is no specific reference for internal use of *Mandur vatak* on it.

So researcher want to study on efficacy of *Mandur vatak* on *Pandu roga*.

MATERIALS AND METHODOLOGY

The patient of *Pandu roga* of different duration and age were selected. The age groups between 15 years to 45 years were taken for this research. All patients were studied in single pilot group research. 60 patients were taken for this research. It's an observational clinical study, to assessment Anaemia dieses, assessment of haemoglobin percentage (%) test before and after of the drug administrated in all patients. Complication and special congenital cases excluded from this research.

Dosage and duration of trail

Dosage: 500 mg or 2 tab (twice a day)

Duration: 30 days

Assessment criteria

1. Subjective parameter: Relief of clinical signs and symptoms.

2. Objective parameter

a. Hb% gm

b. Total R.B.C. count

Selection of cases

Babe ke Ayurvedic medical college and hospital, Daudhar, moga, Punjab.

Observation and analysis: 60 patients of *Pandu roga* were evaluated under different parameters viz- age, sex, occupation, religion, kostas, marital status, economical status, educational status and also under *Dashvidh pariksha bhavas*.

Table no.1: classification of 60 patients according to Age

Sr.no.	Age group in yrs.	No. of patients	Percentage of patients %
1	15-20	10	16.67
2	21-25	15	25
3	26-30	18	30
4	31-35	10	16.67
5	36-40	05	8.33
6	41-45	02	3.33
Total		60	100

Interpretation: 30% of patients had in 26-30 age group followed by 3.33 % in 41-45.

Table no.2: classification of 60 patients according to Sex

Sr.no.	Sex	No. of patients	Percentage of patients %
1.	Male	18	30
2.	Female	42	70

Total	60	100
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Interpretation: 70% of patients had female followed by 30% male.

Table no.3: classification of 60 patients according to Occupation

Sr.no.	Occupation	No. of patients	Percentage of patients %
1	Students	28	46.67
2	Home Workers	18	30
3	Employs	11	18.33
4	Farmers	3	5
Total		60	100

Interpretation: 46.67% of patients had students followed by 5% farmers.

Table no.4: classification of 60 patients according to Education

Sr.no.	Education status	No. of patients	Percentage of patients %
1	Educated	50	83.33
2	Un-Educated	10	16.67
Total		60	100

Interpretation: 83.33% of patients had educated followed by 16.67% Un-Educated.

Table no.5: classification of 60 patients according to Kosta

Sr.no.	Kosta	No. of patients	Percentage of patients %
1	Mrudu	02	3.33
2	Madhyam	36	60
3.	Krur	22	36.67
Total		60	100

Interpretation: 60% of patients had madhyam Kosta followed by 3.33% mrudu kosta.

Table no.6: classification of 60 patients according to Prakruti

Sr.no.	Dosha	No. of patients	Percentage of patients %
1	Vata	0	0
2	Pitta	0	0
3.	Kapha	0	0
4.	Vata-pitta	38	63.33
5.	Vata-kaphaja	8	13.33
6.	Pitta-kaphaja	14	23.34
7.	Tridoshaja	0	0
Total		60	100

Interpretation: - 63.66 % of patients had vata-pitta followed by 13.33% vata-kaphaja.

Table no.7: classification of 60 patients according to food-habits

Sr.no.	Food-Habits	No. of patients	Percentage of patients %
1	Vegetarian	37	61.67
2	Non-Vegetarian	23	38.33
Total		60	100

Interpretation: 61.67 % of patients had vegetarian in food habits followed by 38.33 % Non-vegetarian.

Table no.8: classification of 60 patients according to marital status

Sr.no.	Marital status	No. of patients	Percentage of patients %
1	Married	36	60
2	Un-Married	24	40
Total		60	100

Interpretation: - 60% of patients had married followed by 40% Un-married.

Table no.9: classification of 60 patients according to Economical status

Sr.no.	Income status	No. of patients	Percentage of patients %
1	High income	08	13.33
2	Middle income	34	56.67
3.	Poor income	18	30
Total		60	100

Interpretation: - 56.67 % of patients had Middle income followed by 13.33 % high income.

Table no.10: symptomatic relief after taking *Mandura vatak*

Sr.no.	Symptoms	B.T.	A.T.			Relief %
			10 days	20 days	30 days	
1.	Pallor	50	45	22	00	100
2.	Weakness	50	38	19	00	100
3.	Leanness	40	28	14	05	87.5
4.	Palpitation	30	17	11	00	100
5.	Hrud-peeda	15	10	07	01	93.3
6.	Breath-less-ness	40	22	12	02	95
7.	Heaviness	20	12	08	00	100
8.	Vertigo	18	10	06	01	94.5
9.	Drowsiness	35	20	11	00	100
10.	Shirah-shoola	30	18	10	01	96.67
11.	Karna-shweda	05	03	02	01	80
12.	Shrama	36	24	12	05	86
13.	Sotha	28	18	12	03	90
14.	Alasya	32	20	10	02	94
15.	Pada-shoola	29	18	12	04	86
16.	Sarwanga-shoola	40	22	13	05	87.5
17.	Anna-dweshya	42	28	18	03	92.85
18.	Anga-sadna	15	12	08	02	86.67
19.	Jwara	05	03	01	00	100
20.	Netra-shohta	08	05	02	00	100

Interpretation: - Patients had 100% complete relief in Pallor, weakness, palpitation, Heaviness, Jwara and Netra sotha followed by 80% in karna-shweda.

Table no.11:- Hb gm% improvement after using *Mandura vatak*

Sr.no.	Decrease Hb %	B.T.	A.T.	Relief %
1	Mild	18	01	95.5
2	Moderate	30	04	86.67
3.	Severe	12	03	75
Total		60	08	86.67

Interpretation: - 95.5 % relief had in mild decreased Hb% patients followed by 75% of severe decreased Hb% patients after *Mandur vataka* taken. 86.67 % had complete relief after *Mandur vatak* administration.

Table no.12:- Total R.B.C. count improvement after using *Mandura vatak*-

Sr.no.	Decrease R.B.C. count	B.T.	A.T.	Relief %
1	Mild	48	03	93.75
2	Moderate	10	02	80
3.	Severe	02	01	50
Total		60	06	90

Interpretation: - 93.75 % relief had in mild decreased R.B.C. count patients followed by 80% of severe decreased R.B.C. count patients after *Mandur vataka* taken. 90 % had complete relief after *Mandur vatak* administration

Table no.13:- showing no. of patients and % of relief from the disease –

a) **Complete relief-** The relief of >75% of symptoms of Pandu (Anaemia) assume complete relief.

b) **Moderate relief-** The relief of 45 - 75% of symptoms of Pandu (Anaemia) assume complete relief.

c) **No-relief-** The relief of < 45% of symptoms of Pandu (Anaemia) assume complete relief.

Sr.no.	Results	No. of patients	Percentage %
1	Complete Relief	52	86.67
2	Moderate Relief	05	8.33
3.	No- Relief	03	5
Total		60	100

Interpretation: 86.67 % of patients have complete relief, 8.33 % found moderate relief and 5% found No-relief after *Mandur vatak* administrated.

Statistical analysis

- Paired z-test was used to statistical analysis of Hb% values before and after treatment.

- According to statistical analysis of **Hb%**, the **P – value is 0.321** and **H₀ – Accepted (research hypothesis accepted)** for this analysis. **There is no significance difference observed in *Pandu roga*.**
- According to statistical analysis of **R.B.C. count**, the **P – value is 0.321** and **H₀ – Accepted (research hypothesis accepted)** for this analysis. **There is no significance difference observed in *Pandu roga*.**

RESULT AND DISCUSSION

1. 21-30 age group are more prone to Pandu (Anaemia) disease. In adult stage of life Pitta dosha is aggravated. (table no.-01)
2. Females are more prone to Pandu (Anaemia) disease. Females are more prone to pittaja diseases. (table no.-02)
3. Madhyam Kostha patients are more prone to Pandu (Anaemia) disease. Madhyam kostha patients have slow digestion due to agnimandya. (table no.-05)
4. Vata-Pitta Prakruti patients are more prone to Pandu (Anaemia) disease. (table no.-06)
5. Vegetarians are more prone to Pandu (Anaemia) disease. (table no.-07)
6. Pallor, weakness, palpitation, Heaviness, Jwara and Netra sotha symptoms are 100% relived after *Mandur vatak* administration. *Mandur vatak* is iron rich medicine and its direct increases haemoglobin level which helpful to reduce pandu (Anaemia). (table no.-10)
7. **95.5 %** relief had in mild decreased Hb% patients after treatment because mild Hb decreasing is easily recovered by iron rich *Mandur vatak* medicine. (table no.-11)
8. **Total 86.67 %** of patients have complete relived of Pandu (Anaemia) disease followed by *Mandur vatak* treatment. (table no.-13)
9. According statistical analysis haemoglobin percentage is **increases** after the *Mandur vatak* management in *Pandu roga* patients.
10. According statistical analysis total R.B.C. count is increases after the *Mandur vatak* management of patients in *Pandu roga*.

CONCLUSION

We got above observation and results on efficacy of *Mandur vatak* in management of *Pandu roga*, as it is an indivisible aspect that adult age group, female patients, *Madhyam kosta* patients, *Vata-Pitta Prakruti* patients and vegetarian patients are more prone to *Pandu* (Anaemia) disease. All symptoms such as pallor, weakness, palpitation, heaviness, *jwara* and

netra sotha symptoms of *Pandu roga* which are research subjective criteria, are reduces after *Mandur vatak* administration. Haemoglobin percentage level are reduces (mild, moderate and sever) in *Pandu*.

Mandur vatak is iron rich medicine and it seems to be maintained iron in blood and correction of metabolic disorders, which is useful in *Pandu roga* management, Thus *Mandur vatak* plays an important role in management of *Pandu roga* (Anaemia disease).

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