

MANAGEMENT OF PANDU ROGA WITH SPECIAL REFERENCE TO IRON  
DEFICIENCY ANAEMIA THROUGH AYURVEDA: A CASE STUDYNilofar S. Sheikh<sup>1\*</sup>, Mrityunjay Sharma<sup>2</sup> and Archana Dachewar<sup>3</sup><sup>1</sup>M. D. Scholar, <sup>2</sup>Asso. Professor and Guide, <sup>3</sup>Professor and HOD  
Department of Kayachikitsa, Shri Ayurved Mahavidyalaya, Nagpur, Maharashtra, India.

\*Corresponding Author: Dr. Nilofar S. Sheikh

M. D. Scholar, Department of Kayachikitsa, Shri Ayurved Mahavidyalaya, Nagpur, Maharashtra, India.

Article Received on 09/10/2021

Article Revised on 29/10/2021

Article Accepted on 19/11/2021

## ABSTRACT

*Pandu Roga* is one among them which occurs due to *Dhatu Vaishamy*. *Pandu* is described in all Ayurvedic classical texts. As the name denotes the main feature of *Pandu Roga* is *Pandutva*. According to Charaka, it is one among the *Rasavaha Srotodushti*. Sushruta has mentioned it as *Raktavaha Srotodushti*. Insufficient dietary intake and improper absorption of iron are the causes of Iron Deficiency Anaemia which presents with the significant symptoms such as feeling of weakness, tiredness, and shortness of breath, palpitations, Koilonychias, tingling sensation, dysphagia and altered sensation of taste. The modern management of Iron Deficiency Anaemia is to find out and treat the underlying cause and to give iron to correct the Anaemia. The best preparation of oral iron is Ferrous Sulphate 100 mg twice daily. But this has adverse effect like nausea, constipation etc. In Ayurveda there are many single drugs as well as combinations of herb mineral drugs available for the effective management of *Pandu Roga*. Present study reveals that *Pandu Roga* can be managed successfully with Ayurvedic treatments without any side effects.

**KEYWORDS:** *Pandu*, *Rasa Dhatu*, *Rakta Dhatu*, Anaemia, Iron deficiency.

## INTRODUCTION

*Pandu Roga* is *Pitta Pradhana Vyadhi*.<sup>[1]</sup> It is a disease entity described in Ayurveda which bears great resemblance to the clinical picture of Anaemia.<sup>[2]</sup> It develops due to depletion of *Rasadhatu* which in turn becomes ineffective in the production of *Raktadhatu*. In Ayurvedic classics, the description of *Pandu* is available in three forms i.e. *Pandu* as a disease, *Pandu* as a complication, *Pandu* as a sign of certain diseases. As the name denotes the main feature of *Pandu Roga* is *Pandutva*. According to Charaka, it is one among the *Rasavaha Srotodushti* features. Sushruta has mentioned it as *Raktavaha Srotodushti*. *Pitta Dosha* vitiation is the main causative factor which in turn vitiates *Vata* and *Kapha Dosha* too. *Rakta*, *Mamsa* and *Twaka* are also vitiates.<sup>[3]</sup> *Alparakta*, *Alpameda*, *Ojokshaya*, *Shihtilendriya* and *Vaivarnya* of *Sareera* are the *Pratyatma Lakshana* of *Pandu Roga*.<sup>[4]</sup>

Anaemia is the most prevalent nutritional deficiency disorder in the world.<sup>[5]</sup> In this disease reduction of haemoglobin, number of RBCs per cumm of blood and quantity of Hb% are resulting in pallor of the skin.<sup>[6]</sup> Globally, anaemia affects 1.62 billion people, which corresponds to 24.8% of the population.<sup>[7]</sup> 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.<sup>[8]</sup> It is estimated that

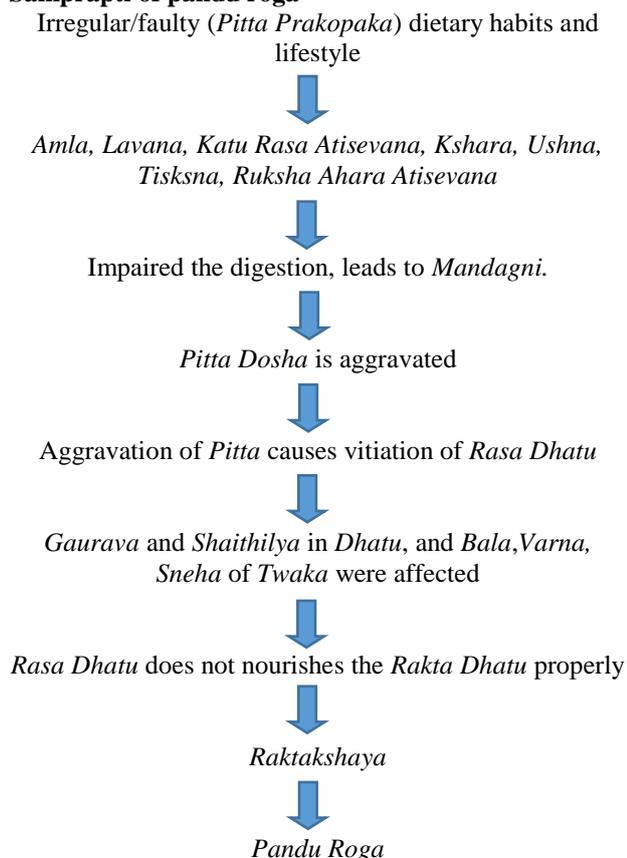
about 20- 40% of maternal deaths in India are due to Anaemia and one in every two Indian women (56%) suffers from some form of Anaemia.<sup>[9]</sup> Anaemia has got a very high prevalence rate in the world over and in spite of the massive efforts of the modern medical science; a good control has not been achieved. New associations in the treatment module are needed to combat Anaemia more successfully.<sup>[10]</sup>

The causes of Iron Deficiency Anaemia are insufficient dietary intake and improper absorption of iron which causes symptoms such as feeling of weakness, tiredness, shortness of breath, palpitations, koilonychia, glossitis, dysphagia and altered sensation of taste.<sup>[11,12]</sup> The modern management of Iron Deficiency Anaemia is to find out and treat the underlying cause and to give iron to correct the Anaemia. The best preparation of oral iron is Ferrous Sulphate which is given at a dose of 100 mg twice daily but this has many adverse effects like nausea, diarrhea, dyspepsia, constipation etc.<sup>[13]</sup>

Ayurveda being holistic medicine advises that all diseases are due to malfunction of Agni (*Agnimandya*). If metabolism is good everything gets digested and assimilated, which is necessary for the sustaining the health. Both Ayurveda and contemporary science accepts the fact that derangement of *Agni* (metabolism) is the root cause of the disease. As a result of weakened *Agni*

an intermediate product of metabolism called *Ama* is formed. This *Ama* causes diseases like *Pandu*. *Pandu* being a *Santarpanajanya Vikara*, requires *Teekshna oushadies* like *Loha* to break the *Samprapti*. Contemporary science also accepts the facts that disturbed absorption along with dietary insufficiency is the root cause for Iron Deficiency Anaemia. Here is a novel approach to manage *Pandu* (Iron Deficiency Anaemia) without using iron as a direct supplement. Selected compound does not contain iron as direct ingredient thus averting the adverse effect of oral iron therapy.

**Samprapti of pandu roga**



**Case report**

A 22 years female patient visited to Kayachikitsa OPD of our institute with chief complaints of 1) *Panduta* (Pallor

of skin) 2) *Shwasa* (dyspnea) 3) *Agnimandya* (Loss of appetite) 4) *Daurbalya* (generalized weakness) 5) *Gatrashool* (bodyache) 6) *Aruchi* (loss of taste) 7) *Pindikodweshtana* (leg cramps). Patient had above complaints since 4 months.

**History of present illness**

According to the patient, she was asymptomatic before 4 months. Then patient started suffering from loss of appetite, body ache, Gradually increase was observed in the complaints of breathlessness, loss of taste. Patient was also having complaints of general weakness, pain in calf muscle, dizziness. She consulted an allopathic doctor and took therapy for 1 month. The problems persisted even after allopathic treatments and she visited our hospital to take Ayurveda treatment. Considering the symptoms we diagnosed it as a case of *Pandu Roga*.

**History of past illness-** No any past illness.

**Personal history –**

Occupation: Student.

Bad habits: No addictions      Diet: Pure veg.

**Family history:** All family members have no history of any severe disease.

**General examination**

General condition of patient is moderate

Pulse- 88/min, regular BP-110/70 mm of Hg R.R. – 24 /min.

Pallor++ Weight- 35kg Height- 154cm

R/S: AE=BE Clear CVS-S1, S2 normal, no abnormal sound

CNS- conscious, oriented: place, person, time

Appetite- Loss of appetite Sleep- Normal Bowel habit- Clear

Urine- Clear Menstrual history- Scanty and regular

**Treatment plan**

1. *Punarnava Mandura* 500 mg BD with Takra.
2. *Drakshasava* 20 ml BD with water.
3. *Dadimadi Ghrita* 10 ml at morning OD with water.

**Total duration of therapy:** 2 months.

**Investigations-**

1. CBC
2. ESR

**OBSERVATIONS AND RESULT**

**Table no. 1: Subjective criteria.**

Sr. No.	Subjective criteria	Grade	BT	AT
1.	<b>Panduta (Pallor)</b>			
	No pallor	0		0
	Pallor of conjunctiva	1		
	Pallor of conjunctiva, nails, tongue	2	2	
	Pallor of conjunctiva, nails, tongue, skin, palm and soles	3		
2.	<b>Shwasa (Dyspnea)</b>			
	No	0		0
	Occasional on exertion	1		
	Walking upstairs / quick Moving	2	2	
	On bed	3		

3.	<b>Agnimandya (Loss of Appetite)</b>			
	Good appetite	0		
	Patient takes meals 3 times/day with little desire	1		1
	Patient takes meals 2 times/day with little desire but associated with nausea and vomiting	2		
	No desire to take meals	3	3	
4.	<b>Daurbalya (General weakness)</b>			
	Not present	0		
	Occasional in normal activity	1		1
	Persistent in normal activity	2	2	
	<i>Daurbalya</i> even in resting condition	3		
5.	<b>Aruchi (Loss of appetite)</b>			
	Very good appetite	0		
	Irregular	1		1
	Occasionally poor appetite (appetite is not on time)	2	2	
	Frequently persistent very poor appetite	3		
6.	<b>Pindikodweshtana (Leg cramps)</b>			
	No	0		0
	Mild leg cramps only at night	1		
	Leg cramps present in night or on exertion	2		
	Leg cramps present throughout the day	3	3	

Table No. 2: Objective criteria.

Investigations	BT	AT
Hb%	9.3 g/dl	11.7 g/dl
TLC (/mm <sup>3</sup> )	7710 mm <sup>3</sup>	8190 mm <sup>3</sup>
DLC (%)	P (60%), L (33%) E (02%), M (05), B (00%)	P (56%), L (31%), E (03%), M (10%), B (00%).
ESR (mm/hr)	47	23
PBF	RBC's- Anisocytosis, Microcytosis Platelet- appear adequate on smear.	RBC's-Normochromic, Mild microcytosis Platelet- appear adequate on smear.
RDW	20%	14%
TRBC	3.88 million/mm <sup>3</sup>	4.39 million/mm <sup>3</sup>
MCV	55 fl	71 fl
MCH	18.6 pg	28.5 pg
MCHC	33.7 g/dl	39.9 g/dl

## DISCUSSION

Ayurveda has a unique understanding of human physiology and pathology that offers a different perspective in diagnosis and treatment of disease. *Acharya Charaka* described, *Mandura* and its preparations' importance to treat the *Pandu Roga* (Anaemia). *Drakshasava* is very useful to improve *Agni* (digestion strength), abnormal function of *Agni* is the root cause of *Pandu Roga*. Based on this fact the drug helps in breaking the pathogenesis of *Pandu Roga*. The drug *Dadimadi Ghrita* have hepato-protective, appetiser, digestive and carminative properties. Hence it protects the liver and improves digestive power, assimilation of *Ahara rasa* and *Aushadhi*.

In the present case by virtue of *Rasa* and *Guna*, *Mandura Bhasma* (metallic/mineral preparation) pacifies aggravated *Pitta* and maintain the normalcy. As the drug contains *Haritaki*, *Punarnava*, *Sunthi*, *Maricha*, *Pippali*, *Kutha*, *Nagarmotha*, *Chitraka* which all are *Tikta Daravya* and act on liver, the organ for the metabolism of every product and increase the appetite, decrease

*Daurbalya* and drugs like *Sunthi*, *Pippali*, *Chitraka* is also used in *Shwasa Roga* which helps in decreasing problem of breathlessness. The drug *Punarnava Mandura* contains *Gomutra Bhavita Mandura Bhasma*, which increase the iron binding capacity and absorption of iron. *Anupan* of the drug is *Takra* which also increase the capacity of digestion. Therefore it is useful in *Pandu* and act as a good drug for the *Pandu*.

## CONCLUSION

The patient was evaluated and treated according to Ayurvedic principles. From the study we can conclude that *Pandu Roga* can be successfully managed by Ayurvedic treatment with lesser chances of recurrence as the disease is treated by its root cause and no side effects are observed during the course of therapy.

## REFERENCES

1. Charaka Samhita (Vol II) Prof P.V. Sharma, Chikitsa Sthana Chp PanduRoga Chikitsitam, Chuakhambha Orientalia, 2005; 273: 16 – 4.

2. Brahmanand Tripathi, Hindi Commentator, Charaka Samhita. Varanasi, Chaukhamba Surbharati Prakashan, 1997.
3. Acharya.Y. T. charakasamhita editor. Chikitsa stana Varanasi. Choukambha Surabharathi Prakasan, 2010; 526: 16: 4-6.
4. Harishasthri B. Astangahrudaya editor. Nidanastana Varanasi. Choukambha surabharathi Prakasan, 2010; 517: 13, 1-7.
5. Parthibhan P, Chilambuselvi P, Sasireka R, Samraj K. Evaluation of haematinic activity of the Siddha Drug Pitha Paandu Maathirai on Phenyl Hydrazine induced anaemic rats International Journal of Research in Pharmacy and Biosciences August, 2015; 2(7): 23-27.
6. Savills. Savill's System of Clinical Medicine, London, Edward Arnold Publishers, 1964; 813.
7. Kawaljit K. Anaemia 'a silent killer' among women in India: Present scenario. European Journal of Zoological Research, 2014; 3(1): 32-36.
8. Malhotra P, Kumari S, Kumar R, Varma S. Prevalence of anaemia in adult rural population of North India. Journal of the Association of Physicians of India Jan, 2004; 52: 18-20.
9. National Family Health Survey (NFHS-III), 2005-2006, [http://www.nfhsindia.org/pdf/ India.pdf](http://www.nfhsindia.org/pdf/India.pdf), last accessed on, 2014; 4.
10. Rai S, Kar A C. An Observational Study on the Etiopathological Factors of Pandu Roga in the Patients of Various Anaemias, Scholars Journal of Applied Medical Sciences, 2015; 3(1A): 12-16.
11. Fauci.s, Kaspel.L, Longo.L, Hauser.l, et al, editors. Harrison's principles of medicine. 17<sup>th</sup> edition. Newyork. McGraw Hill, 2008; 635.
12. A. Boon. N, Colledge.N.R, walker. R, editors. Davidson's Principles and practice of medicine. 20<sup>th</sup> edition. London. Churchill Living Stone, 2010; 1025-1027.
13. A. Boon. N, Colledge.N.R, walker. R, editors. Davidson's Principles and practice of medicine. 20<sup>th</sup> edition. London. Churchill Living Stone, 2010; 1025-1027.