

AN AYURVEDIC APPROACH OF LIFESTYLE MODIFICATION IN ANEMIA IN  
CHILDREN - A CASE STUDYDr. Smita Jagdish Ahire\*<sup>1</sup> and Dr. Vijay Suryavanshi<sup>2</sup><sup>1</sup>P.G Scholar Kaumarbhritya Department.<sup>2</sup>Guide and HOD Kaumarbhritya Department.

\*Corresponding Author: Dr. Smita Jagdish Ahire

P.G Scholar Kaumarbhritya Department.

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**ABSTRACT**

Nutritional deficiency is the major cause for disease in developing countries like India. In India, most of the peoples are below poverty level and they are not able to afford balanced nutritional diet like milk, cereals, and green leafy vegetables for their routine diet. Due to which, Indian children are prone towards nutritional deficiency disorder like Iron Deficiency Anaemia. Anemia is a common problem in children. A child who has anemia does not have enough red blood cells or hemoglobin. The most common causes of anemia- such as iron deficiency are generally easy to treat. It is achieved by many herbal medicines and pathyapalan, which are describe by *Ayurveda*, especially for Anemia. WHO opines that more than 2 millions of children in world are anaemic and in which half of the children are suffering from Iron Deficiency Anaemia. Ayurveda is concerned with severe depletion of ojasogunaah in body (like *bala*, *Varna*, *sneha* etc.) leads to alparakta and alpameda. Such child attains vivarnata of skin like *pandu*.

**KEYWRDS:****INTRODUCTION**

Anemia defined as a reduction of the red blood cell volume or hemoglobin concentration below the range of values according to healthy person. Although a reduction in the amount of circulating hemoglobin decrease the oxygen carrying of the blood, few clinical disturbances occur until the hemoglobin level falls below 7.8g/dl. Below this level, pallor becomes evident in the mucous membranes.<sup>[1]</sup> Anemia is most often recognized by abnormal screening laboratory tests. Patients only occasionally present with advanced anemia and its attendant signs and symptoms.<sup>[2]</sup> According to the third National Family Health survey (NFHS3), 79% of Indian children have anemia, including 71% of urban children and 84% of those in rural areas. The history provides significant clues to the etiology of anemia, Causes vary with age and anemia may be multifactorial disease. The hemoglobin level at which symptoms of anemia appear depends on the rate of development of the anemia. Symptoms occur at higher hemoglobin level if anemia develops rapidly, as with hemorrhage. The most common and earliest symptoms include lassitude, and easy fatigability. Alternative, children may have anorexia, irritability and poor school performance. Dyspnea on exertion, tachycardia, and palpitations indicate severe anemia.<sup>[3]</sup> In Ayurveda, Anemia canbe compare with Pandu roga. Definition of Pandu roga describe by Acharya Maddhavkar in madhavnidan 8th chapter.

The causative factor, pathogenesis, type and treatment of panduroga is describe by Acharya charak in chikitsasthana 16th chapter, Acharya sushruta in uttarsthana 44th chapter.<sup>[5,6]</sup> Acharya Vagbhat in nidansthana 13th chapter and chikitsasthana 16th chapter.<sup>[7]</sup> Yogratnakar also mentioned 5 type of Pandu.<sup>[8]</sup> Acharya kashyap given few specific pre-symptoms of Pandu roga in Vedanasthana.<sup>[9]</sup> There are 5 type of panduroga, according to Acharya Charak, Acharya Vagbhat. Acharya Madhavkar, Acharya sharangadhar.<sup>[10]</sup> Acharya Sushruta mentioned 8 type of Pandu.<sup>[11]</sup>

**CASE REPORT**

A 12 year aged female patient visited the outpatient department of Kaumarbhritya, presenting with symptoms of weakness, anorexia, breathlessness, palpitation fatigue since 3 month. Patient has no any past history. Parents belongs lower middle socio economic community. Patient already consulted too many doctors, where she had diagnosed anemia because of hemoglobin level was 6.8 gm%. She had taken medicine continuously for 2 month but she didn't found any relief.

**Antenatal History**

Age of mother at the time of conception was 19 years and the father was 25 years. The mother took regular antenatal checkups and took medicine on time. No history of any kind of infections, diabetes, hypertension.

**Natal History**

Child was delivered by normal vaginal delivery at 39th week of gestational age with birth weight of 2.9 kg. No any history of neonatal Asphyxia, Neonatal jaundice, infection, congenital hypertension, or seizures was reported. Neonatal jaundice, infection, congenital anomalies. Feeding started after 1 hour of delivery.

**Postnatal History**

No any abnormal postnatal history found.

**Family History**

NAD.

**Developmental History**

All milestones are attained at proper time.

**Medical History**

Calcium supplement, Multivitamins supplements, Zinc supplement etc.

**Anthropometry**

1.	Head circumference	54cm
2.	Chest circumference	86cm
3.	Mid arm circumference (both)	26cm
4.	Mid thigh circumference (both)	54cm
5.	Height	157cm
6.	Weight	26cm

**General examination**

Consciousness- conscious	Lymphadenopathy – Absent
Icterus-absent	Cyanosis-absent
Clubbing-absent	Gait-scissoring gait
Pallor-Present	Eye-Normal

**Vital sign**

Blood pressure- 110/70mmhg  
Respiratory rate: 20/min  
Heart rate - 89/min  
Temperature -97.8oF

**Respiratory system**

Chest bi- symmetrical, no added sound  
RR- 20/min

**Cardio-vascular system**

S1S2 Heard, No murmurs, HR-89/min  
Per-abdomen: Soft, no any prominent veins, mild splenomegaly present.

**Immunization History**

All vaccination given as per Schedule.

**Dietic History**

Exclusive breast feeding was done up to age of 6 month, weaning began with boiled potato, fruit juice, banana etc at the age of 7 month.

**Personal History**

Appetite –Reduced Bowel – Twice/day.  
Micturition –Normal, 3-4 time/day.  
Sleep –Disturb

**General Examination**

General Comment–Alert, active, well nourished child with normal sensorium.

**Vital signs**

HR –81/min  
RR –19/min  
Temp.97.8oF

**Central nervous System**

Higher mental function  
Motor system Sensory system Intact Cranial nerve  
Locomotors No any Abnormal seen.  
Central nervous System:  
Higher mental function  
Motor system  
Sensory system  
Cranial nerve  
Locomotors

No any abnormality seen.

**Investigations**

Done on before and after treatment.

Investigation	Before treatment	After treatment
HB %	6.5 gm/dl	10 gm/dl
MCV	65	70
MCH	24	28
MCHC	29	35
RDW	13.5	15.5
PLATELET COUNT	170000	247000
SICKLE CELL ANEMIA TEST	Negative	NOT DONE
Thalassemia test	Negative	NOT DONEs

**Ayurvedic view**

Pitta-pradhan tridoshaj dusti.

**Ayurvedic view**

Pitta-pradhan tridoshaj dusti Diagnosis:

The case was diagnosed as Nutritional Anemia.

Ayurvedic diagnosis is pandu roga.

**Assessment criteria****Subjective**

For assessment the result four symptoms will be kept as parameter.

**Paleness**

- Grade 1- Present
- Grade 2- Absent

**B) Hemoglobin %**

- Grade 0- Below 6gm%
- Grade 1- 6 gm% - 8 gm%
- Grade 2- 8gm% - 10 gm%
- Grade 3- 10gm% - 12gm%

**C): Joint pain**

- Grade 1 – Present
- Grade 2- occasionally
- Grade 3- Absent

**D) Headache**

- Grade 1- Present
- Grade 2- Absent

**Treatment plan**

S.n Shaman chikitsa	Pathya's (Diet chart)
Tab. Arogyavardhani vati 125 mg BD	Early Morning: (lemon juice with honey, pomegranate juice) Breakfast :Chapati (2-3) Egg (1)
Tab. Dhatri-loha 125 mg BD	Lunch: Fruits (pomegranate, raisins), rice, dal, red spinach.
Syp. Amyron 10ml BD	inner: Dal pani, palak, chapatti (2-3), Milk (1 glass)
Guduchi choornas 1 gm + ½ tab kamdugdha rasa 1 BD Follow up- 1 month (Duration of treatment- 3 month)	

**RESULT**

Effect of Ayurvedic medicine and Pathya palan on symptoms of Anemia.

**DISCUSSION**

Pandu roga is a common disease which is seen growing children. In these condition children is not able to achieve the original nutrients and ions part from the food. In above case study patient got 80% relief from symptoms of Anemia, and hemoglobin is increase 6.8gm% to 10.6gm%. In Charak samhita, sushruta samhita, Astang hridaya and other classics are given many verities of treatment for Panduroga, which is very effective in the management of pandu roga.<sup>[12-14]</sup> Oral medication is not sufficient to treat the Panduroga, pathya palan is also essential. In this study chosen to give oral medication with proper diet charts for 3 month and got significant result in reliving the symptoms of pandu. Arogyavardhani vati have properties of Deepan –pachan, that support the proper digestion of food and helps in the formation of rakta dhatu which is increase the hemoglobin value in the patient.<sup>[15]</sup> Guduchi is a anti-oxidant drug, In Bhaishjya ratnavali Guduchi choorna mentioned as Pleeha-yakrit Rogadhikar and its effective in the treatment of Pandu roga and Aruchi.<sup>[16]</sup> Dhatri loha which is also indicated in the pandu roga in bhaishjya ratnavali because the ingredients of the dhatri loha is Amalaki choorna, Loha bhasma, Shunti, Pippali.

Marich Haridra, And these drugs are blood enhancer and Trikatu (Shunti, Marich, Pippali) is help the GIT system for proper digestion.<sup>[17]</sup> The ingredienents of Kamdugdha rasa are calcium carbonate, iron oxide, which is helpful

to increase the blood level in the body. The ingredients of Amyron syrup are Draksha, Shatavari, Aswagandha, Vidari kand, Kaunch, Aamlaki etc, which drugs are indicated in the management of anemia, general debility anorexia. In this patient the diet (Pathya palan) is advised according to the condition of the patient in which diet helps in the proper digestion of food and increases the blood level in the body.

**CONCLUSION**

In this patient, the overall effect was found near 80%. Therefore it can be concluded that Ayurvedic medicine along with pathya palan (Diet) help to improve the level of the blood i.e. hemoglobin, which is very effective in the management of the pandu roga and improving the quality of life.

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