



**ORIGINAL RESEARCH PAPER**

**Ayurveda**

**STUDY OF DIFFERENT TYPES OF AETIOLOGICAL FACTORS OF PANDU ROGA AS PER CHARAK SAMHITA WITH SPECIAL REFERENCE TO ANEMIA**

**KEY WORDS:** Pandu, Anemia, Hetu

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**ABSTRACT**

The disease Pandu which is described in Ayurveda is very much correlated to Anemia as per modern medicine. In view of that it is found necessary to see whether the aetiological factors of Pandu Roga is having any relation in the occurrence of anemia. The present clinical study is based on observation of various aetiological factors of Pandu Roga as per Charak samhita in anemia. A sample of 30 Nos. of OPD & IPD patients were taken and evaluated for the various hetus with the help of questionnaires made in proforma related to hetus. A statistical data & analysis was done between the different hetus ( aetiological factors ) and a discussion & conclusion was made .

**INTRODUCTION**

Pandu is a disease where the colour of the skin becomes pale. The term pandu means the colour which resembles the pollen grain of ketaki flower which is pale in appearance as described in Ayurvedic Samhitas. It is also called as Bhekabarna which means the colour of a skin of frog, which is also pale & rough having no lusture.

In Pandu the person becomes nihsar, kantihin, and also prabhahani occurs due to which the person becomes pale, loss bodily integrity, tone, luster, strength. Pandu is being described in various texts like in Vedas, Puranas, also in Mahabharata.

As because of the similarities between the sign & symptoms of pandu roga with anaemia of modern medical science it is widely compared with each other.

Anaemia may be defined as a state in which the blood hemoglobin level is below the normal range for the patient's age and sex. Here the numbers of erythrocytes are decreased. It may be due to abnormal loss, due to destruction of the red cells or failure of erythropoiesis. Anaemia reflects the diminished oxygen carrying capacity of the blood.

The disease Pandu Roga according to Charak can be compared with anaemia after observing sign and symptoms. But practically the etiological factors for pandu roga are not always evaluated so the study was done to observe whether they have any contribution .

**AIM & OBJECTIVES:-**

To study the various etiological factors of Pandu Roga as per Charak Samhita and its relation with aneamia.

**MATERIALS & METHOD:-**

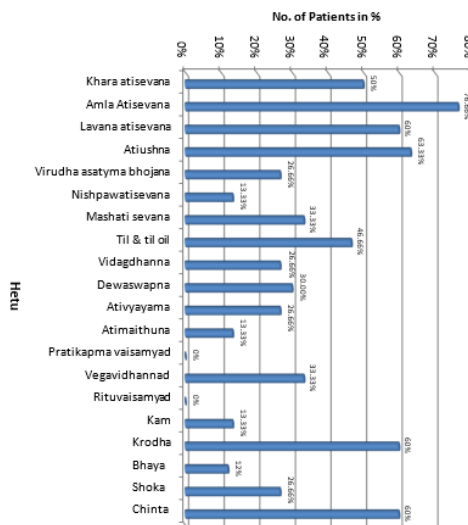
A clinical study was done on 30 patients of aneamia from Govt. Ayurvedic College & Hospital, Ghy-14 under some exclusion & inclusion criteria. The diagnosed patients of aneamia under the inclusion criteria were evaluated to detect the presence of aetiological factors of Pandu Roga as per Charak Samhita in a specially designed proforma. Data of the subjective parameter were studied by some appropriate statistical tools & data above 50 % was considered as influencing hetu.

**STATISTICAL ANALYSIS & OBSERVATION**

**1. HETUWISE DISTRIBUTION**

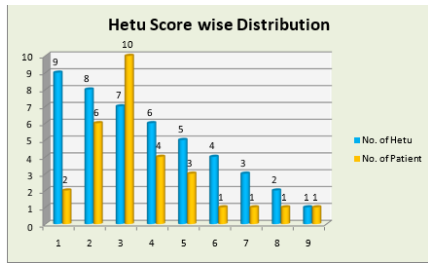
Hetu	No. of Patients	Percentage
Khara atisevana	15	50%
Amla Atisevana	23	76.66%
Lavana atisevana	18	60%
Atiushna	19	63.33%
Virudha asatyma bhojana	8	26.66%

Nishpawatisevana	4	13.33%
Mashati sevana	10	33.33%
Til & til oil	14	46.66%
Vidagdhanna	8	26.66%
Dewaswapna	9	30.0%
Ativyayama	8	26.66%
Atimaithuna	4	13.33%
Pratikapma vaisamyad	0	0%
Vegavidhannad	10	33.33%
Rituvaisamyad	0	0%
Kam	4	13.33%
Krodha	18	60%
Bhaya	4	12%
Shoka	8	26.66%
Chinta	18	60%



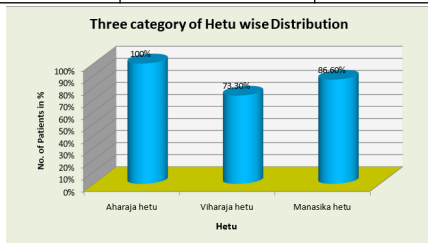
**2. Hetu Score wise Distribution.**

No. of Hetu	No. of Patient
9	2
8	6
7	10
6	4
5	3
4	1
3	1
2	1
1	1



**3. Three category of Hetu wise Distribution.**

Hetu	No. of Patient	Percentage
Aharaja hetu	30	100%
Viharaja hetu	26	73.3%
Manasika hetu	22	86.6%



**DISCUSSION**

**1. KSHARATISEVENA:**

The study shows that the percentage of occurrence of Pandu Roga is high, showing a percentage of 50% i.e. out of 30 patients 15 nos. of patient are taking kshara.

In recent studies it is clear that for iron absorption, gastric acidity must be maintained at a particular pH. If it is disturbed, it can inhibit nonheme iron. Excessive consumption of alkaline substances can interfere with the absorption of nonheme iron by not allowing the solubilization of iron in gastric and duodenal fluids.

Further the modern science again mentioned that the use of soda bicarbonate leads to the increase secretion of hydrochloric acid which may leads to disturb the required gastric acid balance in the stomach as well as in the duodenum. For which the absorption of iron will be inhibited, leading to iron deficiency Anaemia. It shows that Ksharatisevena may have some relation with anaemia.

**2. AMLATISEVENA:**

The study shows that the percentage of amlatisevena hetu is 76.6% which is the highest in the entire study.

It is having a property of laghu guna, usna and snigdha. By the ushna guna it aggravates the pitta dosha. Diets having sour taste add to the deliciousness of food, stimulate appetite, nourish and energize the body enlighten the mind, strengthen the sense organs, promote growth, alleviate vata, nourish the heart, cause salivation, help in swallowing, moistening and digestion of food, they are refreshing.

In spite of all these good qualities, if used in excess in isolation, they cause thirst, morbid sensitiveness of teeth, closure of eyes, horripilation, liquification of kapha, aggravation of pitta, vitiation of rakta, decomposition of muscle, flaviness of body, oedema in patients suffering from emaciation, consumption, cachecia and weakness.

Recent studies in modern science suggest that many sour food like lemon, orange, tangerine, juices etc. they are responsible for heart burn, gastric regurgitation and reflux esophagitis. They very much destroys the gastric mucosal layers slowly & slowly causing disease like atrophic gastritis.

These factors results in impaired Fe absorption as describe

earlier. Vitamin B<sub>12</sub> is an essential factor, deficiency of which is responsible for developing Megaloblastic Anaemia. It is well known that certain intrinsic factors are released from the parietal cells gastric mucosa, which are very important for the absorption of vitamin B<sub>12</sub>. Vit. B<sub>12</sub> is absorbed in the ileum.

Due to the damage to the gastric mucosa, there will be loss of IF secreting cells which in turns may impaired the absorption of Vit. B<sub>12</sub>. Also in the intestine if there is a loss of absorptive surface, again this may impaired the absorption of Vit. B<sub>12</sub>.

There is a relation between the acidic food habits and the malabsorption of various nutrients including vit. B<sub>12</sub> and folic acid. Acidic foods are very important factors which inhibits many enzymatic actions requires for the synthesis of the iron in the whole process of RBC formation in bone marrow.

Alcoholism is another cause for deficiency of folic acid as mentioned in modern science. Folic acid is a important factor for the production of RBC. Lack of folic acid hinders synthesis of DNA. In terms there will be anaemia due to deficiency of Vit. B<sub>12</sub> & folic acid. It shows that Amlatisevena may have some relation with anaemia.

**3. LAVANATISEVENA:**

The percentage of lavanatisevena hetu is found 60% in the study, which is the third highest.

Inspite of all good qualities, if used in excessive amount they cause vitiation of pitta, aggravation of rakta, thirst, fainting, heating sensation, erosion, depletion of muscle tissue, bursting of inflamed parts, dislodgement of teeth, reduction of manhood, obstruction of the function of sense and production of premature wrinkling, graying and baldness. It shows that Lavanatisevena may have some relation with anaemia.

**4. USHNATISEVENA:**

In this present study the percentage of ushnatisevena hetu is the second highest, it is 63.3%. Ushna means heat, it can be understand the diets and drugs which produces heatness in the body is known as ushna guna. The diets which brings about perspiration from the body is said to be ushna in nature. It vitiates the pitta dosha, increase the bleeding tendency, it also decline the dhatus. It acts as a dipena and pachana. Excessive intake of ushna may have some relation with anaemia.

**5. KRODHA:**

The percentage of krodha as hetu is found 60%. Krodha aggravates the pitta dosa. It is always advised to suppress or minimize the mental rage in our classics, avoiding krodha we can achieve the mental peace, free from bad deeds and enjoy a happy life.

Recent studies also show anger as a cause for many out coming diseases. Anger makes the prefrontal lobes shutdown and its reflexive back areas take over. Hormonal and cardiovascular responses kick in. The fight or flight response can prompt our nervous system to cut down blood flows to our stomach and divert it to our muscles, imparting digestive secretions. During prolonged and frequent eruption of rage, parts of the nervous system become highly activated, which can affect of immune system over time. Emotional factors like anger causes increased acid secretion. It shows that Krodha may have some relation with anaemia.

**6. CHINTA:**

The percentage of chinta as hetu is being found 60% which is again in a higher side. It is responsible for causing many sharirika and manasika vyadhis.

In modern days stress is a major problem in the society. Urbanization, industrialization leading to a hectic life causes stress

to the mind. People running for the shelter, livelihood and soon, developing depressions among the people. In present studies, it is found that the emotional factors like fear & depression decrease the acid secretions. Anaemia is often caused by constant stress and anxiety. Stress interferes with the production of hydrochloric acid which is necessary for the assimilation of proteins and iron. It shows that Chinta may have some relation with anaemia.

### CONCLUSION

1. Aharaja hetus like amlatisevena, lavanatisevana atiushan asevana, ksharatisevena may have some relation with anaemia.
2. Manasik hetus like krodha and chinta may have some relation with anaemia .

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