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# PANDUGHNA DRUGS OF BHAVPRAKASH NIGHANTU: A LITERARY REVIEW

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## ABSTRACT

Pandu roga is Pitta pradhan vyadhi with the involvement of vata and kapha doshas. Acharya Charaka has classified rogas according to ruja varna, samuthana, sthana, samsthana. in this classification, the disease Pandu falls in the group of varna. In Pandu there is some significant change in the normal colour of the body. Acharya Dalhana stated Pandu means colour. The combination of white and yellow colours in equal proportion are called Pandu varna. Excessive colour of Panduthwam is seen in Pandu rogi. Present food habits with life style changes, poor socio economic condition, mental stress and strain plays an important role in causing and aggravating Pandu roga. Based on nidan (Causes) and lakshan (Sign and symptoms) Iron deficiency anaemia can be co related to Pandu. Anaemia is a condition in which the number of red blood cells or the haemoglobin concentration within them is lower than normal. Iron deficiency, and specifically iron deficiency anaemia, remains one of the most severe and important nutritional deficiencies in the World today, every age group is vulnerable. Iron deficiency impairs the cognitive development of children from infancy to adolescence. It damages immune mechanisms, and is associated with increased morbidity rates. Anaemia is a serious 'Global Public Health' problem that particularly affects young children and pregnant women. WHO estimates that 42% of children less than 5 years of age and 40% of pregnant women worldwide are anaemic.

**KEYWORDS:** Pandu, Anaemia, Iron Deficiency Anaemia, Bhavprakash Nighantu.

## INTRODUCTION

Panduroga as a disease of 'Rasavaha Strota'. Panduroga is developed as a result of imbalance and variation of tridoshas (tri humors) due to Santarpanjanya hetvas or Apatarpanjanya hetvas, it is mentioned by Acharya Charaka. **'**Pandu' means 'pallor'. In this disease, there is pallor on the skin due to deficiency of blood tissue either in the form of haemoglobin or Red Blood Cells (RBC), hence it is called Anaemia. It is one of the most prevalent disease is India, especially in women population.[1] Panduroga is probably the most common disorder seen in human being. Although it is commonest where malnutrition or deficiency but it is also found in over nutriated peoples. Panduroga is mainly seen in those people who could not get proper nutritious diet, the peoples more suffered from who are in below poverty level. But according to Ayurveda, it is not restricted up to blood and blood forming haemopoietic system, but it is caused due to non-sequential transformation of food into proper body components rasa, rakta upto shukra & oja.

### Etymology

'Pandu' word is formed by root dhatu 'Padi-Pashi' with 'kru' as pratayaya. This root dhatu belongs to 10th gana.

'Pad-pashi' means 'Nashane' i.e. to destroy.

Pandu is a varna- parak i.e. colour indicating name.

So above meaning is to destroy natural colour.

The physiological natural colour of skin is pink. Loss or destruction of this pink colouration leads to whiteness, pallor, therefore 'Pandu' means whiteness, pallor.[2]

### Definition[3]

According to Acharya Vijayraksita, a person who acquires Pandu Varnatwam (pallor) is a Pandu Rogi (Anaemic patient).

Pandu has been compared with Ketaki Dhooli or Ketaki Pushpa Rajah i.e. that can be considered as combination of white and yellow colours.

### Synonyms of pandu

According to Acharya Sushruta,

Kamala, Panaki, Panduroga, Kumbahwayo, Laghavaka, Alasaka.

According to Vedic Literature,

Vilohita, Harima, Halima (Ref. Atharvana Veda 4-9-3, 1-22-22).[3]

**Samanya nidana (General etiology)**

1. Aaharaja (Foods)
2. Vihāra
3. Manasika (Psychological factors)- (See the table no: 1)

These cause aggravation of Pitta and other doshas.

**Table no: 1: Samanya nidana (General etiology).[4]**

| Aharaja | Viharaja | Manasika |
|---|---|---|
| **Rasa pradhanta** Kshar, Amla, Lavana | Vidagdhhe | Kama |
| **Guna pradhanta**- Atiushna | Diwaswapna | Chinta |
| **Dravya pradhanata-** Nishpav, masha, Pinnyak, Tila taila, Mrid | Vyayama | Bhaya |
| | Ati vyavaya | Krodha |
| | Pratikrama | Shoka |
| | Ritu vaisamya | |
| | Vegadharana | |

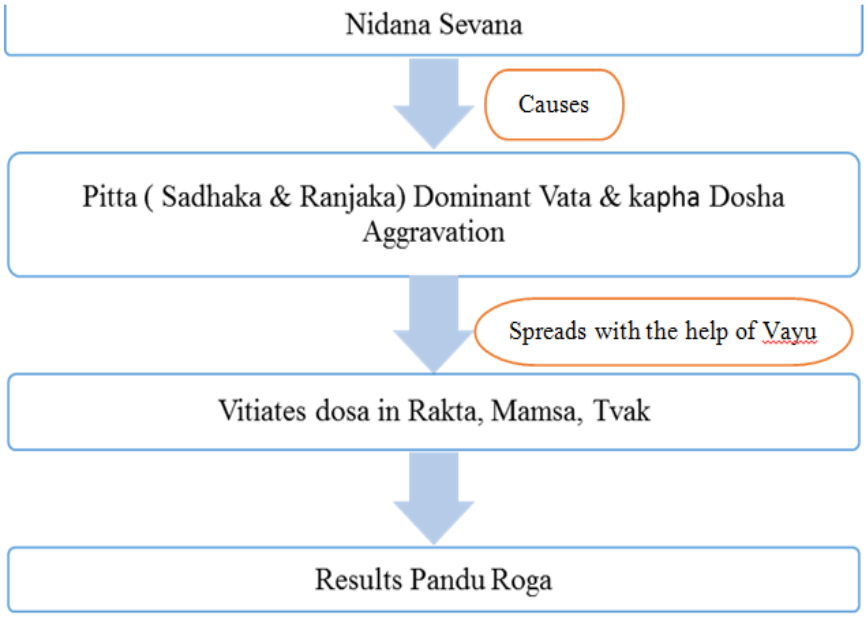



**Chart no. 1: Samprapti of pandu roga.**

**Samprapti ghatak of pandu roga[5]**

**Dosa -** Pitta Pradhan Tridosaja Vyadhi

**Pitta –** Sadhaka Pitta, Ranjaka Pitta & Bhrajaka Pitta

**Kapha-** Avalambaka, Kledaka

**Vata-** Vyana Vata

**Dushya-**

**Dhatu-** Rasa, Rakta, Mamsa, Meda; later all the dhatus (Nihsara)

**Upadhatu-** Sarva Upadhatu

**Saririka mala-** Mutra, Purisha

**Dhatu mala-** Kapha, Pitta

**Agni-** Jatharagni, Dhatwagni

**Agnidusti-** Mandagni

**Ama-** Agnijanya

**Srotas-** Rasavaha, Raktavaha

**Srotodusti-** Sanga, Vimargagamana

**Udhavasthana-** Amasayotha

**Saancharasthana-** Twak & Mamsa

**Vyaktasthana**- Twak

**Swabhava**- Chirakari.

**Purvarupa (Premonitory Signs and Symptoms) of pandu roga[6]**

1. Tvaksphota (Crackling of skin)
2. Shthivana (Spitting of sputum)
3. Gatrasada (General body malaise)
4. Mrdbhakshana (Liking for mud intake)
5. Kuta sotha (Oedema over eyes)
6. Vinmutra pitatva (Pallor/yellowness of stool and urine).
7. Avipaka (Indigestion) (Sus.sam.utt.44/5)
8. Hrid-spandana (Palpitation)
9. Roukshya (Dryness)
10. Svedabhava (Absence of perspiration)
11. Shrama (Easy fatigue) (Ch.su.ci.16/12).

**Samanya rupa (General symptoms)**

1. Raktalpata (Lack of blood)
2. Alpamedaska (Fat and marrow deficiency)
3. Nisara (Weakness)
4. Shithilendrya (Sensory weakness)
5. Vaivarnya (Altered complexion). (Ca.Chi.16/6)

**Types of pandu roga according to different acharyas.**

| Charaka[5] | Sushruta[4] |
|---|---|
| Vataja Pandu | Vataja Pandu |
| Pittaja Pandu | Pittaja Pandu |
| Kaphaja Pandu | Kaphaja Pandu |
| Sannipataja Pandu. | Sannipataja Pandu. |
| Mrdbhakshana janya Pandu | |

**Table no. 2: Samanya lakshana of pandu roga according to different authors.[7]**

| Sl. no. | Symptoms | Charak | Vagbhatta |
|---|---|---|---|
| 1 | Karnakshweda | + | + |
| 2 | Hata anala | + | + |
| 3 | Dourbalya | + | + |
| 4 | Annadwesha | + | + |
| 5 | Shrama | + | + |
| 6 | Bhrama | + | + |
| 7 | Gatra sula | + | - |
| 8 | Jwara | + | + |
| 9 | Swasa | + | + |
| 10 | Gourav | + | - |
| 11 | Aruchi | + | - |
| 12 | Gatra mardan | + | + |
| 13 | Gatra peeda | + | - |
| 14 | Akshikoota shoonyata | + | - |
| 15 | Harita varna | + | - |
| 16 | Koota sadan | - | + |
| 17 | Sheerna loma | + | + |
| 18 | Hata prabha | + | - |
| 19 | Kopana | + | + |
| 20 | Shisira dweshi | + | + |
| 21 | Nidralutwa | + | - |
| 22 | Shthivana | + | + |
| 23 | Alpa vaka | + | + |
| 24 | Pindikoudwestana | + | - |
| 25 | Kati, uru, pada ruk | + | - |
| 26 | Kati, pada, uru, sada | + | - |
| 27 | Sphurana arohana ayasa | + | - |
| 28 | Dhatu saithilya | + | + |
| 29 | Ojoguna ksaya | + | + |
| 30 | Alpa rakta | + | + |
| 31 | Alpa medas | + | + |
| 32 | Nihsarata | + | + |
| 33 | Shithilendriya | + | + |
| 34 | Hridrava | + | + |
| 35 | Twacha Panduta | + | + |
| 36 | Sanna sakti | - | + |

**Lakshana (Signs & Symptoms) of**[8]

**1) Vataja pandu**

- Ruksha, Krishna, Aruna varnatva of Tvak, Mūtra, Netra etc.
- Toda, Kampa, Anaha, Bhrama, etc. Vataja symptoms.

*These symptoms indicate - Mild Anaemia.

**2) Pittaja pandu**

- Yellowish Mala, Mutra and Netra (Faeces, urine & eyes)
- Ati peetabhata (Yellow colour of body)
- Daha (Burning sensation). Trisna (Thirst) and Jvara (Fever).
- Atisara (Diarrhoea)
- Amlapitta symptoms.

**3) Kaphaja pandu**

- Praseka (Oral secretion), Tandra, Alasya, Atigaurava (excessive heaviness).
- Svayathu (Oedema)
- Suklata of Tvak, Mala, Mutra, Netra, Mukha. (Whiteness of skin, faeces, urine and eyes) (Pallor)

*It represents severe anaemia

**4) Sannipataja pandu**

- Jvara (Fever)
- Arocaka (Anorexia)
- Hrllasa (Nausea)
- Chardi (Vomiting)
- Trsna (Thirst)
- Klama, Ksheena and Hatendriya.

* It represents severe and Febrile anaemia.

**5) Mrdbhakshana janya pandu**

- Sotha Akshikuta (Oedema over eyes),
- Krimi kostha (Worm infestation)
- Atisara (Diarrhoea) etc.

**Modern aspect of pandu roga i.e. iron deficiency anaemia**

**Etymology of anaemia**

**Origin of the word**

Anaemia is derived from the Greek word anaemia which means "lack of blood". The name Anaemia accurately describes this condition as the individual experiences a reduced quantity of red blood cells or haemoglobin which, in turn, causes pale skin.

**Definition of anaemia**

It is a deficiency of red blood cells and haemoglobin. This results in a reduced ability of blood to transfer oxygen to the tissues, causing hypoxia; since all human cells depend on oxygen for survival, varying degrees of Anaemia can have a wide range of clinical consequences. Haemoglobin (the oxygen-carrying protein in the red blood cells) has to be present to ensure adequate oxygenation of all body tissues and organs.

**Definition:- Iron deficiency anaemia**

Iron deficiency is defined as a condition in which there are no mobilizable iron stores and in which signs of a compromised supply of iron to tissues, including the erythron, are noted.[9]

Iron deficiency is one of the most prevalent forms of malnutrition Iron deficiency contributes to death and disability as a risk for maternal and perinatal mortality, and also through its dir contributions to cognitive impairment, decreased work productivity and death from severe anaemia. On an average, globally, 50% of the anaemia is assumed to be attributable to iron deficiency. In developing countries 30-70% of the population is iron deficient. There is an urgent need to develop effective and sustainable interventions to control iron-deficiency anaemia. In India, dietary insufficiency, hookworm infestation and lack of food fortification lead to a wide prevalence of iron deficiency in infants, women and children.[10]

**Normal haemoglobin levels[11]**

Haemoglobin is measured in grams per decilitre of blood.

The normal levels are:

- Women: 12.1 to 15.1 gm/dl
- Men: 13.8 to 17.2 gm/dl
- Children: 11 to 16 g/dl
- Pregnant women: 11 to 15.1 g/dl.

**Global anaemia Prevalence and Number of individuals affected[12]**

| Population Group | Prevalence of Anaemia | | Population Affected | |
|---|---|---|---|---|
| | Percentage | 95% CI | Number (Millions) | 95% CI |
| Pre-school age children | 47.4 | 45.7 – 49.1 | 293 | 283 – 303 |
| School age Children | 25.4 | 19.9 – 30.9 | 305 | 238 – 371 |
| Pregnant women | 41.8 | 39.9 – 43.8 | 56 | 54 – 59 |
| Non-Pregnant women | 30.2 | 28.7 – 31.6 | 468 | 446 – 491 |
| Men | 12.7 | 8.6 – 16.9 | 260 | 175 – 345 |
| Elderly | 23.9 | 18.3 – 29.4 | 164 | 126 – 202 |
| Total population | 24.8 | 22.9 – 26.7 | 1620 | 1500 - 1740 |

**Pathophysiology of iron deficiency anaemia[13]**

The various stages in the development of iron deficiency anaemia are shown in Table 1. At the earliest stage the tissue iron stores are depleted. At the next stage iron-deficient erythropoiesis takes place. Finally haemoglobin synthesis falls and frank iron deficiency anaemia develops. In certain conditions, the total body iron stores are adequate but a state of 'relative iron deficiency' exists. This is usually seen when erythropoietin is used to stimulate erythropoiesis in renal failure or in malignancy. For erythropoietin to be effective a large amount of iron should be mobilised from the body stores and this is not possible. Oral supplementation is also not able to compensate, as the rate of absorption is less than the rate of utilisation. Parenteral iron is required in this situation.

**Table no. 3: Stages in development of anaemia iron deficiency anaemia.**

| Earliest stage | Reduced iron stores |
|---|---|
| Depletion of iron stores | Reduced marrow haemosiderin<br>Reduced serum ferritin |
| Intermediate stage | Reduced serum iron |
| Iron- deficient Erythropoiesis | Increased serum transferrin (total iron binding capacity)<br>Reduced transferrin saturation (<16%)<br>Elevated transferrin receptor<br>Reduced marrow sideroblasts<br>MCH lower limits of normal or low (hypochromic cells)<br>MCV lower limits of normal |
| Late stage | Reduced MCH and MCV (hypochromic microcytic cells) |
| Iron- deficient anaemia | Increased RDW (anisocytosis)<br>Reduced red cell count<br>Reduced haemoglobin |

**Causes of iron deficiency anaemia**

The various causes of iron deficiency anaemia are listed in Table 2. The commonest cause is reduced iron intake. The Indian diet, rich in vegetables and poor in haem-iron is not a good source of bioavailable iron. Blood loss contributes to iron deficiency.

**Table no. 4: Causes of iron deficiency.**

| Decreased iron intake | Decreased intake of bioavailable iron |
|---|---|
| Increased iron requirement | Pregnancy<br>Growth: infancy, puberty |
| Increased iron loss | Blood loss<br>Gastrointestinal<br>Hookworm infestation (common)<br>Peptic ulcer<br>Haemorrhoids<br>Malignancy<br>Genitourinary<br>Menorrhagia<br>Haemoglobinuria (rare)<br>Pulmonary<br>Pulmonary haemosiderosis (rare)<br>Haemoptysis (rare)<br>Blood donations |
| Decreased absorption | Malabsorption syndromes<br>Intestinal surgery<br>Achlorhydria |

**Features of anaemia**

The common features of anaemia are present, proportionate to the severity and rate of development. Weakness, fatigue, breathlessness, tachycardia may be present. As iron deficiency usually develops slowly, compensatory mechanisms may reduce these features and it is not uncommon to see severely anaemic patients with hardly any symptoms.

**Systemic features of iron deficiency**

Iron deficiency causes tissue changes. Koilonychia and platynychia are seen in severe anaemia suggestive of iron deficiency. Angular stomatitis, glossitis, and pharyngeal webs may be seen. Pica is seen in children. In severe iron deficiency, the iron containing enzymes are low and this can affect immune and tissue function. In infants and children with iron deficiency, there is impaired mental development and this may not improve even with iron replacement.

## MATERIALS AND METHODS

Bhavprakash Nighantu was critically reviewed for the drugs having Pandughna properties.

## OBSERVATION AND RESULT

From the observations it has been identified that 39 dravyas (drugs) have been included with Pandughna action. Among 426 drugs, there are total 39 drugs are mentioned by Acharya Bhavmishra, having Pandughna Karma in 10 different vargas.

**Table no. 5: Percentage of pandughna dravyas in each varga of bhavaprkasha nighantu.[14]**

| Sl. no. | Name of the varga | Total no. of pandughna dravyas | Percentage |
|---|---|---|---|
| 1 | Haritakyadi varga | 5 | 12.82% |
| 2 | Karpuradi varga | 0 | 0% |
| 3 | Guduchyadi varga | 11 | 28.20% |
| 4 | Puspa varga | 0 | 0% |
| 5 | Vatadi varga | 5 | 12.82% |
| 6 | Aamraadiphala varga | 0 | 0% |
| 7 | Dhaatwadi varga | 8 | 20.51% |
| 8 | Dhaanya varga | 0 | 0% |
| 9 | Saaka varga | 3 | 7.69% |
| 10 | Maamsa varga | 0 | 0% |
| 11 | Kritanna varga | 0 | 0% |
| 12 | Vaari varga | 0 | 0% |
| 13 | Dugdha varga | 1 | 2.56% |
| 14 | Dadhi varga | 0 | 0% |
| 15 | Takra varga | 2 | 5.12% |
| 16 | Navanita varga | 0 | 0% |
| 17 | Ghrita varga | 1 | 2.56% |
| 18 | Mutra varga | 1 | 2.56% |
| 19 | Taila varga | 0 | 0% |
| 20 | Sandhaan varga | 3 | 7.69% |
| 21 | Madhu varga | 0 | 0% |
| 22 | Ikshu varga | 0 | 0% |
| | Total | 39 | 100% |

**Table 6: Drugs of haritakyadi varga on pandu with special references.**

| Sl. no. | Drug name | Family | English name | Action of drug | Reference | Rasa | Verya |
|---|---|---|---|---|---|---|---|
| 1 | Ardraka (*Zingiber officinale* Roscoe) | Zingiberaceae | Ginger root | Pandughna | B.P.N 1/51 | Katu | Ushna |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2 | Vanshalochana (*Bambusa arundinacia* Willd.) | Poaceae | Bamboo manna | Pandughna | B.P.N 1/117 | Kashaya Madhura | Sheeta |
| 3 | Haridra (*Curcuma longa* Linn.) | Zingiberaceae | Turmeric | Pandughna | B.P.N 1/197 | Tikta katu | Ushna |
| 4 | Bakuchi (*Psoralea corylifolia* Linn.) | Fabaceae | Psoralea seed | Pandughna | B.P.N 1/209 | Katu Tikta | Ushna |
| 5 | Yavakshara (Potasii carbonas) | - | Impure carbonate of potash | Pandughna | B.P.N 1/254 | - | - |

**Table 7: Drugs of guduchyadi varga on pandu with special references.**

| Sl. no. | Drug name | Family | English name | Action of drug | Reference | Rasa | Veerya |
|---|---|---|---|---|---|---|---|
| 1 | Guduchi (*Tinospora cordifolia* (Willd.) Miers ex Hook. f. & Jhoms) | Menispermaceae | Tinospora | Pandughna | B.P.N 3/9 | Tikta Kashaya | Ushna |
| 2 | Agnimantha (*Premna integrifolia* Linn.) | Verbenaceae | - | Pandughna | B.P.N 3/24 | Tikta Katu Kashaya Madhur | Ushna |
| 3 | Sehunda (*Euphorbia neriifolia* Linn.) | Euphorbiaceae | Milk Hedge/ Common Dulkhedge | Pandughna | B.P.N 3/75 | Katu | Ushna |
| 4 | Mundi (*Sphaeranthus indicus* Linn.) | Compositae/ Asteraceae | | Pandughna | B.P.N 3/217 | Tikta Katu | Ushna |
| 5 | Sweta punarnava (*Boerhaavia diffusa* Linn.) | Nyctaginaceae | Hogweed/ Horse purslene | Pandughna | B.P.N 3/231 | Madhur Tikta Kashaya | Ushna |
| 6 | Bhringaraj (*Eclipta alba* Hassk.) | Compositae/ Asteraceae | - | Pandughna | B.P.N 3/241 | Katu Tikta | Ushna |
| 7 | Brahmi (*Bacopa monnieri* (Linn.) Pennell / *Herpestis monniera* (Linn.) H.B.& | Scrophulariaceae | Bacopa | Pandughna | B.P.N 3/281 | Katu | Ushna |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | K. | | | | | | |
| 8 | Mandukaparni (*Centella asiatica* (Linn.) Urban /*Hydrocotyle asiatica* Linn.) | Apiaceae | Indian Pennywort | Pandughna | B.P.N 3/281 | Tikta **Anuuras:** Kashaya | Sheeta |
| 9 | Suvarchala (*Cleome viscosa* Linn. / C. isocandra Linn.) | Capparidaceae | - | Pandughna | B.P.N 3/286 | | |
| 10 | Devdali (*Luffa echinata* Roxb.) | Cucurbitaceae | Bristly Luffa | Pandughna | B.P.N 3/292 | Katu Tikta | Ushna |

**Table no. 8: Drugs of vataadi varga on pandu with special references.**

| Sl. no. | Drug name | Family | English name | Action of drug | Reference | Rasa | Veerya |
|---|---|---|---|---|---|---|---|
| 1 | Kakodumbara (*Ficus hispida* Linn.) | Moraceae | - | Pandughna | B.P.N 5/10 | Tikta Kashaya | Sheeta |
| 2 | Sarja (*Vateria indica* Linn.) | Dipterocarpaceae | - | Pandughna | B.P.N 5/21 | Kashaya | Sheeta |
| 3 | Khadira (*Acacia catechu* Willd.) | Mimosaceae | Black catechu | Pandughna | B.P.N 5/32 | Tikta Kashaya | Sheeta |
| 4 | Dhava (*Anogeissus latifolia* Wall.) | Combretaceae | Axle wood | Pandughna | B.P.N 5/60 | Kashaya | Sheeta |
| 5 | Tinisha (*Ougenia dalbergioides* Benth.) | Fabaceae | - | Pandughna | B.P.N 5/76 | Kashaya [15] | Ushna |

**Table 9: Drugs of dhatwadi varga on pandu with special references.**

| Sl. no. | Drug name | English Name | Action of Drug | Reference | Rasa | Veerya |
|---|---|---|---|---|---|---|
| 1 | Samyagmaritatamra (Cuprum) | Copper | Pandughna | B.P.N 7/27 | Kashaya Madhur Tikta Amla | Sheeta |
| 2 | Samyagmaritaranga (Stannum) | Tin | Pandughna | B.P.N 7/31 | | Sheeta[16] |
| 3 | Yasada (Zincum) | Zinc | Pandughna | B.P.N 7/33 | Kashaya Tikta | Sheeta |
| 4 | Loha (Ferrum) | Iron | Pandughna | B.P.N 7/42 | Tikta Madhur | Sheeta |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | Kashaya | |
| 5 | Suvarnamakshika | Copper pyrite | Pandughna | B.P.N 7/60 | Madhur Tikta | Sheeta[17] |
| 6 | Taramakshika | Iron pyrite | Pandughna | B.P.N 7/64 | Madhur Tikta | |
| 7 | Aarkuta | Brass | Pandughna | B.P.N 7/73 | Tikta Lavanna | - |
| 8 | Shilajita | - | Pandughna | B.P.N 7/81 | Katu Tikta | Ushna |

**Table 10: Drugs of saaka varga on pandu with special references.**

| Sl. no. | Drug name | Family | English name | Action of drug | Reference | Rasa | Veerya |
|---|---|---|---|---|---|---|---|
| 1 | Guduchi patra | Menispermaceae | Tinospora | Pandughna | B.P.N 9/42 | Kashaya, Katu, Tikta | Ushna |
| 2 | Karvella (*Momordica charantia* Linn.) | Cucurbitaceae | Bitter gourd/ Carilla fruit | Pandughna | B.P.N 9/63 | Tikta | Sheeta |
| 3 | Hastikarna (*Leea macrophylla* Horn.) | Vitaceae | - | Pandughna | B.P.N 9//109 | Tikta | Ushna |

**Table 11: Drugs of dugdha varga on pandu with special references.**

| Sl. no. | Drug name | Action of drug | Reference | Rasa | Veerya |
|---|---|---|---|---|---|
| 1 | Dugdhapanarajana | Pandughna | B.P.N 13/4 | Madhura | Sheeta |

**Table 12: Drugs of takra varga on pandu with special references.**

| Sl. no. | Drug Name | Action of drug | Reference | Rasa | Veerya |
|---|---|---|---|---|---|
| 1 | Sacitraka takra | Pandughna | B.P.N 14/13 | *Kashaya Amla Madhura *Katu | Ushna |
| 2 | Takrasevana visaya | Pandughna | B.P.N 14/15 | Kashaya Amla Madhura | Ushna |

**Table 13: Drugs of ghrita varga on pandu with special references.**

| Sl. no. | Drug name | Action of drug | Reference | Rasa | Veerya |
|---|---|---|---|---|---|
| 1 | Navina ghrita | Pandughna | B.P.N 16/18 | Madhura | Sheeta |

**Table 14: Drugs of mutra varga on pandu with special references.**

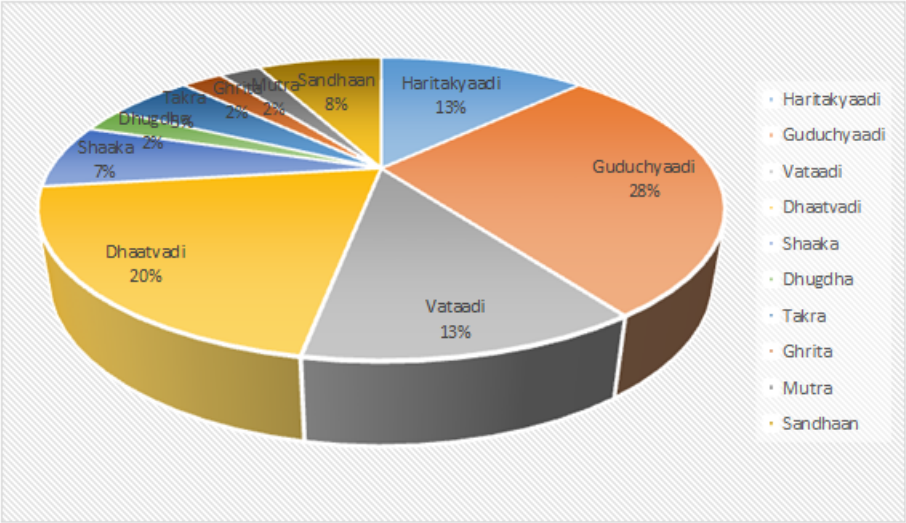
| Sl. no. | Drug name | English name | Action of drug | Reference | Rasa | Veerya |
|---|---|---|---|---|---|---|
| 1 | Gomutra | Cow's urine | Pandughna | B.P.N 17/2 | Katu Tikta Kashaya | Ushna |

**Table 15: Drugs of sandhaan varga on pandu with special references.**

| Sl. no. | Drug name | Action of drug | Reference | Rasa | Veerya |
|---|---|---|---|---|---|
| 1 | Kanji | Panduroga | B.P.N 19/5 | - | Ushna |
| 2 | Tushambu | Pandughna | B.P.N 19/7 | - | Ushna |
| 3 | Shukta | Pandughna | B.P.N 19/15 | - | Ushna |

## DISCUSSION

39 drugs from Bhavaprakasha was found to have action in Pandu. Out of this 39 drugs 5(12.82%) drugs from Haritakyadi varga, 11(28.20) from Guduchyadi Varga, 5 (12.82%) from Vatadi Varga (Groups), 8 (20.51%) from Dhatvadi Varga (Groups), 3 (7.69%) from Saka Varga (Groups), 1 (2.56%) from Dugdha Varga (Groups), 2(5.12%) from Takra Varga (Groups), 1 (2.56%) from Ghrita Varga (Groups), 1 (2.56%) from Mutra Varga (Groups), 3 (7.69%) from Sandhana Varga (Groups). Whereas Karpuradi varga, Pushpadi varga, Amraadi phala varga, Dhanya varga, Maamsa varga, Kritanna varga, Vari Varga, Dadhi varga, navaneeta varga, Taila varga, Madhu Varga, and Ikshu Varga doesn't have any drug having Pandughna action.




**Probable mode of action:** Katu Rasa (pungent) can promote jatharagni and dhatwagni (digestive and metabolic fire) by their Dipana (appetizer) & Pachana (digestive) properties which can nullify the Agnimandhya (weakened digestive fire), Aruchi (anorexia) and may be helpful to break the pathogenesis of Panduroga. Further, Katu Rasa has been said as Marga vivrunoti (penetrates obstruction in channels) and reach even minutes level and increase micro circulation of the Rasa all over the body. **Tikta, Katu, Kashaya Rasa** and **Ruksha Guna** decreases excessive Kleda from Rasa Dhatu which causes Rakta Prasadana. **Tikta Rasa** improves function of yakrut which results in the proper formation of rakta dhatu from

Rasa dhatu with the help of ranjak pitta. **Ruksha (dry)** can revert back the conditions like Dhatu Shaithilya (flabbiness in tissues) found in Panduroga.

## CONCLUSION

From the above discussion we conclude that among 426 drugs of Bhavprakash nighantu, 29 ausadha and 10 aahar dravyas have Pandughna property. The present review can be found beneficial to know about the different single and compound formulations. Pandughna dravyas of aahar varga can be given to Pandu rogi. There are many herbal drugs in Ayurveda which are easily available but are not in common practice. Continuous usage of a particular single drug may cause extinction of several drugs. This review help us to gain knowledge about 39 different Panduhara drugs which can be used for the treatment of Pandu by Ayurvedic physicians in day-to-day practice as medicine and as diet too.

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