

**PANDUROGA - A CLASSICAL AND EVIDENCE BASED REVIEW**Pratibha<sup>1\*</sup>, Dr. Jyoti Arya<sup>2</sup>, Dr. Avinash Kumar Srivastava<sup>3</sup><sup>1</sup>PG Scholar, Department of Kayachikitsa, Patanjali Ayurveda College, Haridwar, Uttarakhand, India.<sup>2</sup>Associate Professor, Department of Kayachikitsa, Patanjali Ayurveda College, Haridwar, Uttarakhand, India.<sup>3</sup>Associate Professor, Department of Kayachikitsa, Patanjali Ayurveda College, Haridwar, Uttarakhand, India.**\*Corresponding Author: Pratibha**

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**ABSTRACT**

Panduroga is a classic illness entity references to which can be traced back to the Vedic period, with mentions in the Rigveda and Atharvaveda under the names Vilohita, Haribha, and Halima. The distinguishing symptom of the disease is Panduta, which is described as a Shweta-Peeta Varna similar to Ketaki pollen. Anaemia affects approximately 1.62 billion individuals worldwide (24.8% of the population), with a higher frequency in preschool children and women of reproductive age. In India, it is a major cause of maternal morbidity and mortality. Anaemia is defined in modern medicine as a decrease in red blood cell or hemoglobin concentration, which causes pallor and weakness throughout the body. Panduroga develops as a result of an unhealthy food and lifestyle, which causes Agni Dushti and Ama production. Impaired digestion impedes Rasa Dhatu production, resulting in Rakta Kshaya and widespread debility. Acharya Charaka classifies Pandu as Rasapradoshaja and Santarpanajanya Vyadhi, while Acharya Sushruta classifies it as Raktapradoshaja and Apatarpanajanya Vyadhi. The condition is caused by multi-Srotas Dushti, which first affects the Rasavaha and Raktavaha Srotas before spreading to other Dhatus and Srotas, resulting in systemic signs. Thus, Panduroga is a systemic metabolic condition similar to Anaemia that requires holistic therapy using Nidana Parivarjana, Samshodhana, and Samshamana therapies.

**KEYWORDS:** Pandu Roga, Panduta, Rakta Kshaya, Anaemia, Agni Dushti, Srotas Dushti.**INTRODUCTION**

Ayurveda, emphasizes the maintenance of health in healthy individuals and the treatment of diseases in the diseased through a holistic approach that includes proper lifestyle, balanced diet, and appropriate therapeutic measures. The body is sustained by the proper functioning of Dosha, Dhatu, and Mala, which are considered the fundamental components responsible for all physiological activities. Disturbance in these elements, particularly vitiation of Pitta Dosha along with Tridosha imbalance, initiates pathological processes that lead to diseases such as Pandu Roga.<sup>[1]</sup> In this condition, aggravated Pitta Dosha affects various Dhatus, resulting in depletion of Rakta, Meda, and Ojas, which ultimately leads to diminished complexion, strength, and unctuousness of the body due to the morbidity of Dosha and Dushya.<sup>[2]</sup>

Acharya Charaka has described Panduroga under Rasapradoshaja Vikara and Santarpana Janya Vyadhi,

while Acharya Sushruta classified it as Rakta Pradoshaja Vyadhi, highlighting the involvement of Rasa and Rakta Dhatu in the disease process.<sup>[3,4]</sup> Classical texts describe the complexion in Panduroga as resembling the pollen of the Ketaki flower, presenting a pale or whitish-yellow discoloration, which is referred to as Panduta.<sup>[3,4,5]</sup> Clinically, Panduroga is characterized by symptoms such as panduta(pallor), daurbalaya(general weakness), klama(fatigue), ashradha (aversion to food), bhrama (giddiness), aruchi(anorexia), angamarda(body ache), and akshikut shotha (periorbital swelling).<sup>[6]</sup>

Pandu is described both as a symptom and a disease entity in Ayurveda and closely resembles anaemia described in modern medicine. The term anaemia is derived from the Greek word "Anaimia," where "an" means without and "haima" means blood.<sup>[7]</sup> It is defined as a deficiency of haemoglobin in the blood or reduction in the number of red blood cells, resulting in decreased oxygen-carrying capacity.<sup>[8]</sup>

Anaemia is one of the most common nutritional deficiency disorders worldwide, with iron deficiency anaemia (IDA) being the most prevalent type. It is particularly common in developing countries like India and mainly affects children and women of reproductive age. Major causes include poor dietary intake, malabsorption of iron, hookworm infestation, excessive blood loss, menstruation, and childbirth. Because the symptoms of Anaemia such as pallor, weakness, fatigue, and dizziness closely resemble the clinical features of Panduroga, a strong correlation can be established between these two conditions. Therefore, understanding Panduroga through classical Ayurvedic literature with special reference to Iron Deficiency Anaemia is important for better conceptual understanding and management of this condition.

### VYUTPATTI

The term “Panduroga” is derived from the Sanskrit root “Padi-Nashane” (destruction or depletion) with the addition of the suffix “Ku” (Pratyaya), indicating degeneration or loss.<sup>[9]</sup>

Amarakosha describes Panduroga as a whitish colour with a yellowish tinge, while Vachaspathyam compares it to the whitish-yellow pollen of the Ketaki flower.<sup>[10,11]</sup>

However, Acharya Charaka explains that Panduroga involves Kshaya of normal Varna (complexion) and refers to the discoloration as Vaivaranya, which commentator Gangadhara has described as Mlana Varna (dull or faded complexion). Thus, Panduroga denotes a generalized discoloration or fading of normal body colour.

### NIRUKTI

According to the Shabdarnava Kosh, the term “Panduroga” denotes a colour similar to the pale yellowish shade of the pollen of the Ketaki flower. The Ketaki flower is commonly used in Ayurvedic descriptions as a metaphor for the pale yellowish-white complexion seen in Panduroga.<sup>[12]</sup>

### NIDANA<sup>[13]</sup>

The etiology / Samanya Nidana of Panduroga mentioned in Charaka, Sushruta and other Samhitas can be broadly classified into 3 groups.

#### Aharaj nidana

- Excessive intake of alkaline, sour, salty, excessively hot, incompatible, and unwholesome foods.
- Consumption of heavy dietary substances such as Nispāva (certain pulses), Māṣa, Piṇyāka (oil cake), and excessive use of Tila Taila (sesame oil).

#### Viharaj nidana

- Indulgence in day sleep (Divāsvapna).
- Performing exercise or sexual activity before complete digestion of food.
- Improper administration of Pañcakarma therapies (Pratikarma Vaiṣāmya).

- Non-observance of seasonal regimens (Rtu Vaiṣāmya).
- Suppression of natural urges (Vegadhāraṇa)

#### Mansik nidana

- Psychological factors such as excessive passion, worry, fear, anger, and grief.

#### Other diseases (secondary causes)

Ayurvedic literature has indicated a correlation of various diseases with *Panduroga* either as symptom or as an *upadrava*. So, all these can be causes of *Panduroga* or *nidanarthakara rogas* of *Panduroga*. Some of which are *Raktatipravartana*, *Raktarsha*, *Raktarbuda*, *Asrigdara* or *Raktapradara*, *Arsha Raktarsha* or *Kaphajarsha*, *Rajyakashma*, *Punaravartaka jwara* etc. which directly or indirectly vitiate *vata*, *Pitta* and *Kapha* singly or in combination.

### SAMPRAPTI

#### According to Acharya Charaka

In *Panduroga*, all three Doshas are involved, but *Pitta* Dosh predominates in the pathogenesis.<sup>[14]</sup>

Continuous indulgence in Nidanans leads to aggravation of *Pitta*, particularly *Sadhaka Pitta* located in the *Hridaya*.<sup>[15]</sup> During circulation, the vitiated *Pitta* disturbs *Kapha*, *Vata*, *Asrik* (blood), *Twak* (skin), and *Mamsa* (muscle tissue). The Doshas then localize between *Twak* and *Mamsa*, resulting in *Dhatu Shaithilyata* (tissue weakness) and *Guruta* (heaviness). Due to this vitiation of Doshas and Dhatus, the qualities of *Ojas*, including strength and complexion, gradually diminish.<sup>[16]</sup>

#### Samprapti According to Acharya Vagbhata<sup>[17]</sup>

Due to various causative factors disrupt the *Pitta* Dosh becomes predominantly aggravated. This aggravated *Pitta*, propelled by *Vata* Dosh, moves to the *Hridaya* and then spreads throughout the body through the ten *Dhamanis* (channels) and affects urine, excrement, skin, and other tissues.

During its circulation it vitiates *Kapha*, *Twak* (skin), *Rakta* (blood), and *Mamsa* (muscle tissue) and finally lodges between the skin and muscle layers. As a result, different abnormal skin colours such as pale (*panduroga*), yellow (*haridra*), and greenish (*harita*) appear on the skin. Among these, pallor is the most prominent manifestation, and therefore the disease is termed *Panduroga*.

#### Samprapti Chakra (Pathogenetic Sequence)<sup>[18]</sup>

Tridosha-Prakopaka Ahara and Vihara (Predominantly *Pitta* aggravating factors)

↓

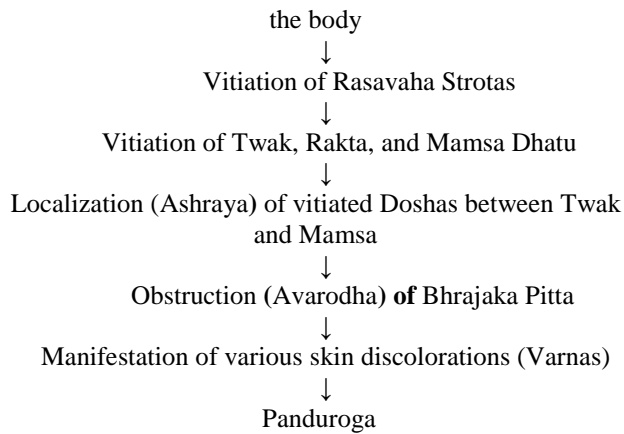
Aggravation of *Sadhaka Pitta* located in *Hridaya*

↓

Expulsion from *Hridaya* by aggravated *Vata* Dosh

↓

Entry into *Dasha Dhamanis* and circulation throughout



### Samprapti Ghataka (Factors Involved in Pathogenesis)<sup>[19]</sup>

**Dosha:** Pitta Pradhan Tridoshaprakopa

**Dushya:** Rasa, Rakta, Twacha, Mansa

**Srotas:** Rasavaha, Raktavaha

**Srotodushiprakar:** Sanga

**Adhistan:** Sarvasharirgattwacha

**Aashya:** Aamshayotha

**Agni:** Dhatvagni

**Vyadhisvabhav:** Chirkari

**Sadhyashadya:** Sadhya/Krichsadhya

### Types of Panduroga according to different Acharyas

| S.no. | Charaka Samhita          | Sushruta Samhita  | Ashtanga Hridaya              | Bhavaprakasha            |
|-------|--------------------------|-------------------|-------------------------------|--------------------------|
| 1.    | Vataja Pandu             | Vataja Pandu      | Vataja Pandu                  | Vataja Pandu             |
| 2.    | Pittaja Pandu            | Pittaja Pandu     | Pittaja Pandu                 | Pittaja Pandu            |
| 3.    | Kaphaja Pandu            | Kaphaja Pandu     | Kaphaja Pandu                 | Kaphaja Pandu            |
| 4.    | Sannipataja Pandu        | Sannipataja Pandu | Sannipataja Pandu             | Sannipataja Pandu        |
| 5.    | Mritbhakshanajanya Pandu |                   | Mrittika Bhakshanajanya Pandu | Mritbhakshanajanya Pandu |

### Purvaroopas

| Lakshana   | Acharya Charaka <sup>[20]</sup> | Acharya Sushruta <sup>[21]</sup> | Acharya Vagbhatta <sup>[22]</sup> |
|--|---------------------------------|----------------------------------|-----------------------------------|
| 1. Hridyaspandanam (Palpitation)                                 | +                               | -                                | +                                 |
| 2. Rokshyam (dryness of the skin)                                | +                               | -                                | +                                 |
| 3. Swedabhavah (absence of sweating)                             | +                               | -                                | +                                 |
| 4. Shramsathata (fatigue)  | +                               | -                                | +                                 |
| Twaksphutanam (cracking of skin)                                 | -                               | +                                | -                                 |
| 2. Sthivana (salivation)   |                                 | +                                | -                                 |
| 3. Gatrasedha (sense of lassitude in the limbs)                  | --                              | +                                | -                                 |
| 4. Mridbhakshanam (liking for mud intake)                        | -                               | +                                | -                                 |
| 5. Prekshankootsothah (swelling over eye socket)                 | -                               | +                                | +                                 |
| 6. Vid-Mutra Pitata (yellow colour of stool-urine)               | -                               | +                                | +                                 |
| 7. Avipaka (Indigestion)   | -                               | +                                | -                                 |
| 8. Aruchi (loss of appetite or anorexia)                         | -                               |                                  | +                                 |
| 9. Alpa Vahni / Mandagni (weak digestive fire or poor digestion) | -                               | -                                | +                                 |
| 10. Sada (weakness or lassitude)                                 | --                              |                                  | +                                 |

### Samanya lakshana<sup>[23]</sup>

In *Panduroga*, *Pandubhava* is invariable feature (*Pratyatmalinga*). All *Acharyas* have mentioned various types of discoloration with other symptoms in different types of *Pandu*. Though, *Acharya Charaka* and *Acharya Vagbhatta* have mentioned the *Samanya Rupas* of *Pandu* also, *Acharya Sushruta*, *Madhava* and *Bhavaprakasha* have not described the *Samanya Rupas* of *Panduroga* but they only mentioned the symptoms of *Doshika Pandu*.

General symptoms of *Panduroga* as described by *Acharya Charaka* are: Karnashveda (tinnitus), Hatanala (weak digestive fire), Daurbalya (general weakness), Annadwesa (Aversion to food), Shrama (fatigue), Bhrama (giddiness), Gatrashoola (body ache), Jwara (fever), Shwasa (breathlessness), Gauravata

(heaviness in the body), Aruchi (anorexia / loss of appetite), Akshikutashotha (swelling around the eyes), Shirnaloma (loss of hair), Hataprabha (greenish discoloration of body complexion), Kopana (Feeling irritable or angry), Shishirdweshi (Dislikes cold stuff), Nidralu (drowsiness), Stheevan (frequent spitting), Alpawaka (reduced or avoided speaking), Pindikodweshthana (pain in calf muscle), Kati-Uru-Paada Ruka (pain and weakness in lower back, thighs, and feet), Sadana (exhaustion on climbing).

## Lakshana

| Lakshana                 | Acharya Charaka <sup>[24]</sup> | Acharya Sushruta <sup>[25]</sup> | Acharya Vagbhatta <sup>[26]</sup> |
|--------------------------|---------------------------------|----------------------------------|-----------------------------------|
| <b>1.Vataj pandu</b>     |                                 |                                  |                                   |
| <i>KrishnaPanduta</i>    | +                               |                                  |                                   |
| <i>Krishnetratavam</i>   |                                 | +                                |                                   |
| <i>Krishnanakhatva</i>   |                                 | +                                |                                   |
| <i>Krishnananatva</i>    |                                 | +                                |                                   |
| <i>Arunanakhatva</i>     |                                 |                                  | +                                 |
| <i>Arunasiratva</i>      |                                 |                                  | +                                 |
| <i>Arunanetrata</i>      |                                 |                                  | +                                 |
| <i>Rukshangata</i>       | +                               |                                  |                                   |
| <i>Rukshasiratva</i>     |                                 |                                  | +                                 |
| <i>Rukshanakhatva</i>    |                                 |                                  | +                                 |
| <i>Rukshanetrata</i>     |                                 |                                  | +                                 |
| <i>Angamarda</i>         | +                               |                                  |                                   |
| <i>Angaruka</i>          | +                               |                                  |                                   |
| <i>Angatoda</i>          | +                               |                                  | +                                 |
| <i>Kampa</i>             | +                               |                                  | +                                 |
| <i>Parshvaruka</i>       | +                               |                                  | +                                 |
| <i>Shiroruka</i>         | +                               |                                  | +                                 |
| <i>Asayavairasya</i>     | +                               |                                  | +                                 |
| <i>Anaha</i>             | +                               |                                  | +                                 |
| <i>Balakshaya</i>        | +                               |                                  |                                   |
| <i>Varchshosha</i>       | +                               |                                  | +                                 |
| <i>Krishnavitaka</i>     |                                 | +                                | +                                 |
| <i>Rukshamutrata</i>     |                                 |                                  | +                                 |
| <b>Pittaj pandu</b>      |                                 |                                  |                                   |
| <i>Pitata</i>            | +                               | +                                |                                   |
| <i>Haritabhata</i>       | +                               | +                                |                                   |
| <i>Pitekshanatva</i>     | +                               | +                                | +                                 |
| <i>Potasiravnasshata</i> | +                               | +                                | +                                 |
| <i>Pitanakhatva</i>      |                                 | +                                | +                                 |
| <i>Pitananatva</i>       |                                 | +                                | +                                 |
| <i>Pitachhavi</i>        |                                 | +                                | +                                 |
| <i>Jwara</i>             | +                               | +                                | +                                 |
| <i>Daha</i>              | +                               | +                                |                                   |
| <i>Trishna</i>           | +                               | +                                |                                   |
| <i>Chardi</i>            | +                               | +                                |                                   |
| <i>Murcha</i>            | +                               | +                                |                                   |
| <i>Sweda</i>             | +                               | +                                |                                   |
| <i>Shitakamita</i>       | +                               | +                                |                                   |
| <i>Katukasayata</i>      | +                               | +                                |                                   |
| <i>Ushnanupashayata</i>  | +                               |                                  |                                   |
| <i>Amlodgara</i>         | +                               | +                                |                                   |
| <i>Pitamutrata</i>       | +                               | +                                | +                                 |
| <i>Pitavitakta</i>       | +                               | +                                | +                                 |
| <b>Kaphaj pandu</b>      |                                 |                                  |                                   |
| <i>Shvetavabhasta</i>    | +                               |                                  |                                   |
| <i>Shveklakshita</i>     | +                               | +                                | +                                 |
| <i>Shuklanantva</i>      |                                 | +                                | +                                 |
| <i>Shuklanakhtva</i>     |                                 | +                                | +                                 |
| <i>Gaurava</i>           | +                               |                                  |                                   |
| <i>Tandra</i>            | +                               |                                  |                                   |
| <i>Chhardi</i>           | +                               |                                  | +                                 |
| <i>Praseka</i>           | +                               |                                  |                                   |
| <i>Lomaharsha</i>        | +                               |                                  | +                                 |

|                              |   |   |   |
|------------------------------|---|---|---|
| <i>Murcha, Bhrama, Klama</i> | + |   | + |
| <i>Kasa</i>                  | + |   | + |
| <i>Alasya</i>                | + |   |   |
| <i>Aruchi</i>                | + |   |   |
| <i>Rukshakamata</i>          | + |   |   |
| <i>Ushnakamata</i>           | + |   |   |
| <i>Madhurasyata</i>          | + |   |   |
| <i>Lavanaktrata</i>          |   | + | + |
| <i>Shuklamutrata</i>         |   | + | + |
| <i>Shuklavarchasa</i>        |   | + | + |

### Sannipataja Pandu

Individuals who habitually consume all types of incompatible and unwholesome foods may develop simultaneous aggravation of all the three Doṣas—Vāta,

Pitta, and Kapha—resulting in Tridoṣaja Pāṇḍu. This condition manifests with a combination of the clinical features of Vātajā, Pittajā, and Kaphajā Pāṇḍu.<sup>[27,28]</sup>

### Mritbhakshanajanya Pandu<sup>[29,30]</sup>

| Lakshana                        | Acharya Charaka | Acharya Vagbhata |
|---------------------------------|-----------------|------------------|
| <b>Mritbhakshanajanya Pandu</b> |                 |                  |
| <i>Akshikutashotha</i>          | +               |                  |
| <i>Asyashotha</i>               | +               | +                |
| <i>Balakshaya</i>               | +               |                  |
| <i>Gandashotha</i>              | +               | +                |
| <i>Krimikoshta</i>              | +               |                  |
| <i>MehanaShotha</i>             | +               | +                |
| <i>Nabhishotha</i>              | +               |                  |

### Sadhya- Asadhyata

According to Charaka<sup>[31]</sup>

- Long-term, severe Pāṇḍuroga is regarded as incurable
- It is also thought to be challenging to treat a patient who experiences edema as a result of the illness.
- A person with obstructed feces mixed with mucous seen with green color is considered to be incurable.
- A person who is weaker, depressed and body seems unctuous and pallor with the symptoms including fainting, vomiting, and extreme thirst are considered to be incurable.

### UPDRAVYA<sup>[32]</sup>

The complications (Upadravas) of Pāṇḍuroga include Aruchi (loss of appetite), Pipāsa (excessive thirst), Chardi (vomiting), Jvara (fever), and Mūrdharuja (headache). There is also Agnisāda (weakening of digestive power/indigestion) and Śopha (edema or swelling). The patient may experience Kaṇthagata Pīḍā (throat discomfort), Abalatva (generalized weakness), Mūrcchā (fainting or syncope), Klama (fatigue/exhaustion), and Hṛdaya Pīḍana (cardiac or precordial pain/distress).

### DISCUSSION

Panduroga is described in classical Ayurvedic texts as a disorder characterized by pallor, weakness, fatigue, and reduced vitality. It is considered a Pitta-dominant Tridoṣaja disease that mainly affects Rasa and Rakta Dhatus. The vitiation of Pitta Doṣha impairs the normal function of Ranjana (imparting color to blood), leading

to pallor and tissue weakness. Classical texts such as the Charaka Samhita and Sushruta Samhita describe different types of Pandu, including Vatika, Paikka, Kaphaja, Tridoṣaja, and Mridabhakshanajanya Pandu. Various dietary and lifestyle factors act as etiological factors in the development of the disease. These include Viruddha Ahara (incompatible diet), Diwaswapa (day sleep), excessive exertion, mental stress, anger, and the habit of Mridabhakshana (consumption of clay). These factors aggravate Doṣhas and disturb the normal formation of Rasa and Rakta Dhatus, leading to Dhatu Shaithilya, Dhatugaurava, Balakshaya, and Varnakshaya.

The Purvarupa (premonitory symptoms) include Hridayaspandana (palpitations), Shrama (fatigue), and Angasada (generalized weakness). As the disease progresses, patients may develop Aruchi (loss of appetite), Panduta (pallor), Gaurava (heaviness), Tandra (drowsiness), Angamarda (body ache), and Shotha (edema). Involvement of various Dhatus may lead to Karshya (emaciation), Shirnalomata (hair fall), and weakness of sense organs.

From a modern perspective, Panduroga closely correlates with Anemia, which is characterized by low hemoglobin levels and reduced oxygen-carrying capacity of blood. Symptoms such as pallor, fatigue, breathlessness, and palpitations are common in both conditions. Management in Ayurveda includes Nidana Parivarjana (avoidance of causative factors), Shodhana therapies such as Vamana and Virechana, and Shamana treatment. Therapies like Deepana–Pachana, Rasayana, and Dhatu

Poshan help restore digestive fire and improve tissue nourishment. Lauha-based formulations are commonly used to improve Rakta Dhatu and enhance hemoglobin levels. Thus, Ayurvedic management offers a holistic approach focusing on correcting the underlying pathology while improving overall health and vitality.

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