A critical review article on *Pandu Roga* (*Vyadhi*) with special reference to anaemia

Sachinkumar Sahebrao Patil

*Department of Kayachikitsa, M.A.M.’s Sumatibhai Shah Ayurved Mahavidyala, Malwadi, Hadapsar, Pune -411028, India.*

World Journal of Advanced Research and Reviews, 2022, 14(02), 305–311

Publication history: Received on 04 April 2022; revised on 10 May 2022; accepted on 12 May 2022

Article DOI: https://doi.org/10.30574/wjarr.2022.14.2.0424

**Abstract**

Pandu Roga is one of the diseases mentioned in Ayurveda characterized by the changes in the skin colour to white (*Shweta*), yellowish (*Peeta*), greenish (*Harita*) etc. which is one of the “Varnopalakshita Roga” i.e. a disease characterized by the change in the colour. The clinical condition of Pandu in Ayurveda can be co-related with Anaemia described in Modern Medical Science, due to the resemblance in the clinical signs and symptoms. Anaemia is a major global public health problem and the most prevalent nutritional deficiency disorder in the world. This article presents the *Ayurvedic* concept of *Pandu Roga* (*Anaemia*).

**Keywords:** *Pandu; Vyadhi; Srotas; Anaemia*

**1. Introduction**

*Ayurveda* is the science of life that is focused on the maintenance of positive health in healthy and eradication of ailments in diseased through its holistic approach, lifestyle practices, dietary habits, and safer medications. Malnutrition either due to inadequate dietary intake or lack of balanced diet and population explosion in today’s world has led to the development of various diseases and *Pandu Roga* is one of such diseases. *Ayurveda* described *Pandu* as *Pitta Pradhana Vyadhi* associated with *Rasa* and *Rakta Dhatu*.

*Pandu Roga* is characterized by the paleness of the body which may be due to reduced blood flow and oxygen or by a decreased number of red blood cells and Anaemia is one of the most common causes of paleness so Pandu Roga can be correlated with Anaemia. Anaemia is the most prevalent nutritional deficiency disorder in the world. Globally, Anaemia affects 1.62 billion people, which corresponds to 24.8% of the population. In India, Anaemia affects an estimated 50% of the population.

In *Ayurveda* concept of *Pandu* is abundantly and mentioned in various literature. The knowledge of this concept is very beneficial to treat different disorders where *Pandu* is a symptom and disease itself. This article presents the *Ayurvedic* concept of *Pandu Roga* (*Anaemia*). Hence, in this article attempt has been made to review various available *Samhita, Samgrahagrantha* to find out the different descriptions about *Pandu* and bring all of them in a single place.

**Aim and Objective**

To review the concept of *Pandu Roga* from different *Ayurvedic* literature.

*Corresponding author: Sachinkumar Sahebrao Patil*

Department of Kayachikitsa, M.A.M.’s Sumatibhai Shah Ayurved Mahavidyala, Malwadi, Hadapsar, Pune -411028, India.

Copyright © 2022 Author(s) retain the copyright of this article. This article is published under the terms of the Creative Commons Attribution License 4.0.
2. Material and Methods

Material has been collected from ancient Ayurvedic texts, Research Journals, and electronic databases.

3. Review of Literature

3.1. Vyutpatti

The word Pandu is derived from 'Padi Nashane' Dhatu by adding 'Ku Pratyaya to it, the meaning of which is always taken in the sense of Nashana and as Pandu has been kept under the group which is classified and named according to the change in colour.

3.2. Nirukti of Pandu

- According to Shabdarnava Kosha 'Pandustu Peet bhagardh Ketaki Dhulisannibham' means Pandu is like the colour of pollen grains of Ketaki flower which is whitish yellow colour.
- 'Pandutwenuplakshito Rogah Pandu Rogah' means the disease which resembles Pandu Varna is known as Pandu.

3.3. Synonyms

According to Sushrut Kamala, Panki, Laghrak, Alas and Kumbhahwa are the synonyms of Pandu.

In Rigveda and Atharvaveda Pandu has been de-scribed by the name of Vilohita, Halima and Haribha.

3.4. Types of Pandu Roga

Acharya Charak described the disease under five categories namely Vataja, Pittaja, Kaphaja, Sanipataja and Mridabhakshanjanya and Acharya Sushruta has accepted only four types of Pandu excluding Mridabhakshanjanya Pandu they are:

- Vataj Pandu
- Pittaj Pandu
- Kaphaj Pandu
- Sanipataj Pandu
- Mridikabhakshanjaya Pandu

3.5. Causative Factors

The etiological / Samanya Nidana of Pandu Roga mentioned in Charaka, Sushruta and other Samhitas can be broadly classified into 3 groups. (Charaka Chikitsa 16/8; Sushruta Uttarsthan 44/3)

- Aharaj Nidana.
- Viharaj Nidana.
- Mansik Nidana.
- Other diseases i.e., Nidanarthaka Roga.

3.5.1. Aharaj Nidana

Food or diet plays an important role in the normal development and maintenance of different Dhatus as well as in the vitiation of Dosha.

- Excess intake of Kshaar (alkaline), Amla (sour), Lavan (salt), Ushna (hot) and Teekshna (penetrating) Ahar.
- The food /Ahar which is Virudhha (incompatibles) and Asatmya (unwholesome)
- Intake of Nishpav, Masha, Pinyak and Til Tail in excess.
- Excess consumption of wine (Madya), eating mud (Mrida) and Mridu Ahar

3.5.2. Viharaj Nidana

- Excessive Diwaswapan, Vyayama and Maithun.
• Pratikarma Vaishamaya (faulty administration of Panchakarma) and Ritu Vaishamaya (faulty management of seasonal regimen)
• Suppression of natural urge (Vega Dharan)

3.5.3. Mansik Nidana

• Mansik Nidana i.e., anxiety, fear, anger, and grief have a major role in the manifestation of Pandu.

3.5.4. Other /Secondary/Nidanarthaka causes

In Ayurvedic literature there is an indication of a correlation between various diseases and Pandu Roga either as a symptom or as Upadrava. So, all these can be causes of Pandu i.e. Nidanarthaka Roga of Pandu.

3.6. Premonitory Symptoms

According to Acharya Charak: Tasya Lingam Bhavishyatam Hridyaspandanam Rokshyam Swedabhavah Shramsatatathah. (Ch. Chi. 16/12) Hridyaspandanam (Palpitation), Rokshyam (dryness of the skin), Swedabhavah (absence of sweating), Shramsatatath (fatigue) According to Acharya Sushruta: Twaksphotnam Shthevangatrasadoo Mridbhakshanam Prekshankootsothah. (Su.U. 44/5) Twaksphotnam (cracking of skin), Shthevan (salivation), Gatrasada (sense of lassitude in the limbs), Mridbhakshanam (liking for mud intake), Prekshankootsothah (swelling over eye socket), Vid-Mutra Pitata (yellow colour of stool-urine), Avipaka (Indigestion) these are mentioned by Sushruta.

3.7. Symptoms

Acharya Charak has mentioned the Samanya and Vishesh Rupa of Pandu Roga in chapter 16 of Chikitsa Sthan according to the Dosha involvement which is mentioned below.

3.7.1. Samanya Rupa

• Loss of Indriye Bala, Tej, Veerya and Oja.
• Loss of Bala, Varna and Agni (power of digestion).
• Karnashveda (tinnitus), Durbalya (general weakness), Annadwesha (aversion towards food), Shrama (fatigue), Bhramanipidita (giddiness), Gatrasula (body ache), Jwara (fever), Shwasa (breathlessness), Gaurva (heaviness), Aruchi (anorexia).
• Akshikutashoth (swelling over orbit), Shirnaloma (hair fall), Hataprabha (body complexion become greenish)
• Kopana (dislikes cold things), Nidralu (feeling of drowsiness), Alpawaka (avoid speaking), Shteevan (spitting frequently)
• Pindikodweshthana (calf muscle pain), Katiu-Pad Ruka (pain and weakness in the lumbar, thighs and feet), Arohanetaya (patient feels exhausted on climbing) Vishishta Rupa: Acharya Charka had classified Pandu Roga into 5 types; based on these types Vishesh Rupas are described.

3.7.2. Vataj Pandu

Krishna-Panduta (black and pale-yellow discolouration), Rukshata (roughness), Aruna-Angatam (Reddishness of the body), Angmarda (body ache), Ruja (pain), Todas (Pricking type of pain), Kampa (tremor), Parshvashiro-ruja (pain in chest-head), Varchashosh (dryness of stool), Aashyavairasya (distaste in mouth), Shopha (edema over body parts), Aanah (constipation), Bala Kshaya (weakness).

3.7.3. Pittaja Pandu

Pita-Haritabhata (complexion become either yellow or green), Jwara, Daha (burning sensation), Trishna (excessive thirst), Murcha (fainting), Pipasa, Pitamutrasrakruta (yellowish discoloration of urine and stool), Sweda (profuse sweating), Sheetakama (increase desire to take cold things), Katukasayta (feeling pungent taste in mouth), Ushnaamalpanpashyata (uneasiness for hot and sour things), Vidahe vidagadhe Anne (feeling of burning sensation during indigestion of food), Daurnagdhyya (foul smell of body), Daurbalya (weakness), Bhinn-varcha (diarrhea)
3.7.4. Kaphaja Pandu

Gaurava (heaviness), Tandra (Drowsiness), Chhardi, Shvetabhasta (whitish complexion), Praseka (excessive salivation), Lomoharsha (Horripilation), Murchha (Fainting), Bhrama (giddiness), Klama (mental fatigue), Sada (looseness of body parts), Kasa, Shwasa (dyspnoea), Alosya (laziness), Aruchi (anorexia), Vaka-swaragaha (obstruction of speech and voice), Shukla Mutra-Akshivarchasa (whitish discolouration of urine, eye and stool), Katurukshoshna Kamta (feeling to take pungent, Hot and dry things), Shwayathu, Madhurasyata (sweetishness in mouth).

3.7.5. Tridoshaja Pandu

Sign and symptoms of all the three vitiated Doshas are present, and this is extremely intolerable because of developing complications.

3.7.6. Mriddhakshanajanya Pandu

Bala-Varna-Agni Nash (loss of strength, complexion, and power of digestion metabolism), Ganda-Akshikuta-Bhru-Pad-Nabhi-Mehan Shotha (oedema on cheek, eye socket, eyebrow, feet, umbilical region, genital parts), Krimi Koshta (Appearance of intestinal worm), Atisaryet Mala Sasruka Kapha (diarrhoea associated with blood and mucus).

3.8. Pathogenesis

Acharya Charaka has mentioned the Samprapti of Pandu in Chikitsa Sthan. According to him, due to consumption of Nidana Pitta located in the Hridaya (Sadhak Pitta) gets aggravated and being expelled from Hridya by powerful Vata and it enters the Dasha Dhamanya (attached to the heart) and circulates all over the body. This aggravated Pitta reaches the space between skin and muscle tissue and brings vitiation in Kapha, Vata, Asrika, Twaka and Mamsa. This leading to abnormal types of colouration like Pandu, Haridra and Harita to the skin.

3.9. Samprapti Ghataka

- **Dosha** – Pitta Pradhan Tridoshaja
- Pitta - Sadhaka, Ranjaka and Bhrajaka
- Kapha – Avalambaka, Kledaka
- Vyana- Vyan Vayu
- Dushya - Twaka, Rasa, Rakta, Mamsa and Meda.
- Strotas – Rasavaha, Raktavaha
- Stroto Dushiti - Sanga and Vimarga Gamanam.
- Agni - Jatharagni and Dhatvagni.
- Agni Dushti - Mandagni
- Udbhavasthaan – Amashaya
- Adhishthana - Twaka Mamsa Abhyantara
- Vyaktasthaan - Twaka
- Sancharatthaan – Twaka & Mamsa
- Svabhav – Chirkari

3.10. Chikitsa

3.10.1. According to Acharya Charak

Tatra Panduvamya Snigdhatwekkshnaurdhvaaranu-lomikeh

Sansodhyo Mriduvitikteeh Kaamli Tu Virachine. (Ch.Chi.16/40)

According to Acharya Charak in Sadhya Pandu Rog, Teekshna Vaman and Virechan should be done.

According to Acharya Sushruta: Harechha Doshan Bahushoalpamatrach Shivayedhhi Doshesvinirharatesu (Su. Ut. 44/22) Means in Pandu Roga, Dosa which get situated in Dhatus, Srotas and Ashayas should be removed by Vaman and Virechan repeatedly if not done so then these Doshas cause Shotha in the different body part.

3.10.2. Snehana Karma

In Pandu Rogi there is Sneha- Abhava (deficiency) and the Doshas get adhered to Shakhas therefore Snehan is essential to bring the Doshas in Koshtha and correct Rukshata. In Pandu Rogi both Bahya and Abhyantara Snehana are indicated.
For Abhyantara Snehana Acharya Charak indicated some medicated Ghee i.e. Panchagavya Ghrit, Mahatiktak Ghrit, and Kalyanak Ghrit etc.

Vamana and Virechana Karma: Somyaka Snehana and Swedana bring the Doshas into Koshtha and by the action of Vaman or Virechana Karma they are expelled out of the body by their action. Virechana is considered as best Shodhanopakarma for Pitta Dosh. So, Virechana is most suitable in Pandu Roga.

3.10.3. Shamana Chikitsa

Vishesha Chikitsa

- In Vatika Pandu Snigdha Guna Pradhan Aushadha are to be used internally.
- In Pittaja Pandu Tikta Rasa and Shita Veerya Pradhan Aushadha are to be used internally.
- In Kaphaja Pandu Katu-Tikta Rasa Yukta and Ushna Veerya Pradhan Aushadha are to be used internally.
- In Sannipataja Pandu Mishrit Guna Aushadha are to be used internally.
- In Pandu Yoga Vanaspatika and Khaniya Yoga, Asava Arishta, Avaleha, Churna Yoga, Vati Yoga are used.

Mriddhakshana Pandu

The ingested soil should be removed from the body by Tikshna Sansodhan (Vaman and Virechana) by evaluating the Sharirik and Agni Bala of Rogi. After the Shodhana when the soil gets out of the body then Agnivardhak and Balvardhak medicated Ghrit should be used to bring strength to the body.

3.11. Upadrava

According to Acharya Sushruta Aruchi, Pipasa, Vaman, Jwara, Murdharuja, Agnisada Shopha, Kan-thagata Abalatwa, Murcchha, Klama and Hruda-yapidana are the Updrava of Pandu Roga.

3.11.1. Pathya-Apathya

Pathayahara

According to Acharya Charak

- Shalianna, Yava, Godhoom mixed with Yusha prepared from Mudga, Adhaki and Masur.
- Jangal Mamsa Rasa.
- Panchagavya Ghrit, Mahatiktaka Ghrit and Kalyanaka Ghrit used for Snehan Karma.

According to Acharya Susruta

- Pandu Rogi must use Arishta prepared from Guda, Sharkara (Sugar) and Shahad (Honey)
- Asava prepared from Mutra and Kshara should be used
- Jangala Mamsa Rasa added with Sneha (Fat) and Amalaka Swaras should be used

3.11.2. Apathayahara

In Bhaisajya Ratnavali following Apathya Aahar are mentioned:

- Rakta Sruti, Dhoompam, Vaman Vega Dharan, Swedan and Maithoon are to be avoided by Pandu Rogi.
- Avoid consumption of Shimbi, Patrashaak, Ramath, Masha, Ambupaan, Pindyaak, Tambul, Sarshapa, and Sura.
- Intake of water of rivers like those originating from Vindhya and Sahyadri Mountain.
- All types of salt, sour edibles, Virudhha Anna (incompatible foods), food that is Guru (heavy to digest) and Vidahi (cause a burning sensation).

3.12. Arishta Lakshana

Acharya Sushruta mentioned fatal signs and symptoms of Pandu Roga in Sutra Sthana (S.Su. 33/23) which are

- Pandu Dhantnakha
- Pandu Netra
- Pandu Shangtadarshi
4. Discussion

Pandu Roga is Pitta Pradhana Vyadhi. Pitta is responsible for the normal colour of the body but when it gets vitiated, Panduta (Pallor) occurs. Though Pitta is Pradhana Dosha in Pandu Roga, Vata Dosha also plays a crucial role in the manifestation of Pandu Roga, mainly Vyana Vayu has a relation with Samprapti of Pandu Roga. Pandu is a Rasavaha Srotas Vyadhi from which a lot of people suffer. In Samhitas most of the Acharyas have described five types of Pandu Roga i.e. Vatika, Paittika, Kaphaja, Tridoshaja and Mridabhakshhanajanya Pandu. The daily faulty routine activity related to mental or physical, faulty dietary habits like Mridikabhakshana, taking food deficient in quality and quantity, Nidanarthaka Roga is some etiological agents of Pandu Roga. Acharya Charaka mentioned three premonitory Symptoms of Pandu Roga i.e. Hridyaspandanam, Rohkshyam and Shram which indicate its future presence. Also in Charak Samhita Samanya and Visheshrupa of Pandu Roga is mentioned. Pandu is Sadhya Roga but in later stages due to chronicity, it develops some complications. Hence, it is necessary to treat it in the early stage. According to Acharya Charak in Sadhya Pandu Roga mediated Teekshna Vaman and Virechan should be done. For the diagnosis and effective treatment, a physician must have complete knowledge of Pandu Roga by different Samhitas.

5. Conclusion

Now a days, number of patients suffering from Pandu Vyadhi are seen due to modern lifestyle, improper dietary habits in routine and the use of modern medicines. Pandu is a Varnopalakshita and Pitta Pradhana Vyadhi which is responsible for the normal colour of the body. Pandu can be correlated with Anaemia. In Ayurvedic literature vast description of Pandu Roga and Chikitsa is given. To treat a Pandu Rogi, a physician must have complete knowledge of different aspects of Pandu like Nidan, Roopa, Poorvaroopa, Samprapti and several Chikitsa Yoga, Sadhyaasadhyta, Arishtalakshan etc. from all Samithas, Nighantu and other literature.

Compliance with ethical standards

Acknowledgments

I express gratitude to the Department of Kayachikitsa and Hospital Authority for giving me this opportunity to study this particular case of Pandu. Special thanks to Secretary of Maharashtra Arogya Mandal’s Secretary, Hon’ble Mr. Anil Gujar, Hon’ble Principal Dr. Nilesh Phule and Faculty members for co-operating throughout to provide better management of the patients.

References


