



A REVIEW ARTICLE ON PANDU ROGA WITH SPECIAL REFERENCE TO ANAEMIA

***Dr. Vivekanand Singh¹, Dr. Kunwar Ratnesh Singh²**

¹Assistant Professor, Department of Kaya Chikitsa, Sardar Patel Institute of Ayurvedic Medical Science and Research Centre, Lucknow, Uttar Pradesh.

²H.O.D and Professor, Department of Kaya Chikitsa, Sardar Patel Institute of Ayurvedic Medical Science and Research Centre, Lucknow, Uttar Pradesh.

*Corresponding Author's Email ID - vs40600@gmail.com, ratneshdoc@gmail.com

ABSTRACT

Ayurveda lists Pandu Roga as one of the "Varnopalakshita Roga" (diseases marked by color changes) that are characterized by changes in skin color, such as white (Shweta), yellowish (Peeta), greenish (Harita), etc. Because of the similarities between the clinical signs and symptoms of Pandu in Ayurveda and Anaemia in Modern Medical Science, the two conditions can be connected. Anaemia is the most common nutritional deficiency illness worldwide and a significant public health concern. The Ayurvedic idea of Pandu Roga (anemia) is introduced in this article.

Keywords: Pandu, Vyadhi, Srotas, Anaemia

1. INTRODUCTION

Through its holistic approach, dietary practices, lifestyle choices, and safer pharmaceuticals, Ayurveda is a science of life that focuses on maintaining good health in healthy people and curing illnesses in unhealthy people. In today's world, a number of diseases have emerged as a result of malnutrition, either from a lack of a balanced diet or from inadequate

nutritional intake. Pandu Roga is one of these disorders. According to Ayurveda, Pandu is Pitta Pradhana Vyadhi, which is connected to 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.

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, Sannipataja and Mridabhakshanajanya and Acharya Sushruta has accepted only four types of Pandu excluding Mridabhakshanjanya Pandu they are:

- Vataj Pandu
- Pittaj Pandu
- Kaphaj Pandu
- Sanipataj Pandu
- Mridikabhakshanjanya Pandu

3.5. CAUSATIVE FACTORS

The etiological / Samanya Nidana of Pandu Roga mentioned in Charka, Sushruta and other Samhitas can be broadly classified into 3 groups. (Charka 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 Bhavishyeta Hridayaspandanam Rokshyam Swedabhavah Shramsatatha. (Ch. Chi. 16/12) Hridayaspandanam (Palpitation), Rokshyam (dryness of the skin), Swedabhavah (absence of sweating), Shramsatatha (fatigue) According to Acharya Sushruta: Twakspothnam Shthevangatrasadoo Mridbhakshanam Prekshankootsothah. Vidmutrapitatwamathaavipako Bhavishtasya Purahsarani. (Su.U. 44/5) Twakspothnam (cracking of skin), Shthevan (salivation), Gatrasada (sense of lassitude in the limbs), Mridbhakshanam (liking for mud intake), Prekshankootsothhah (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), Gatrashula (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), Shtheevan (spitting frequently)
- Pindikodweshthana (calf muscle pain), Katiuru-Pad Ruka (pain and weakness in the lumbar, thighs and feet), Arohaneayasa (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), Toda (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, Pitamutrashakruta (yellowish discolouration of urine and stool), Sweda (profuse sweating), Sheetakamta (increase desire to take cold things), Katukasayta (feeling pungent taste in mouth), Ushnaamlanupashyata (uneasiness for hot and sour things), Vidahe vidagadhe Anne (feeling of burning sensation during indigestion of food), Daurgandhya (foul smell of body), Daurbalya (weakness), Bhinn-varcha (diarrhea).

3.7.4. KAPHAJA PANDU

Gaurava (heaviness), Tandra (Drowsiness), Chhardi, Shvetavbhasta (whitish complexion), Praseka (excessive salivation), Lomoharsha (Horripilation), Murchha (Fainting), Bhrama (giddiness), Klama (mental fatigue), Sada (looseness of body parts), Kasa, Shwasa (dyspnoea), Alasya (laziness), Aruchi (anorexia), Vaka-swaragraha (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. MRIDBHAKSHANAJANYA 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 Dushti - Sanga and Vimarga Gamanam.
- Agni - Jatharagni and Dhatvagni.
- Agni Dushti – Mandagni
- Udbhavasthaan – Amashaya
- Adhishtana - Twaka Mamsa Abhyantara
- Vyaktasthaan – Twaka
- Sancharasthaan – Twaka & Mamsa
- Svabhav – Chirkari

3.10. CHIKITSA

3.10.1. ACCORDING TO ACHARYA CHARAK

Tatra Panduvamyi Snigdhatēekshnaurdhvaaranu-lomikeh

Sansodhyo Mriduvitēkteeh Kaamli Tu Viraichne. (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 Shvayedhhi Doshesvtinirharatesu (Su. Ut. 44/22)

Means in Pandu Roga, Dosha 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 Koshttha 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: Samyaka Snehan and Swedana bring the Doshas into Koshttha 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 Dosha. 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 Poga Vanaspatika and Khanija Yoga, Asava Arishta, Avaleha, Churna Yoga, Vati Yoga are used.

Mridbhakshana 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

Pathyahara

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. APATHYAHARA

In Bhaisajya Ratnavali following Apathya Aahar are mentioned:

- Rakta Sruti, Dhoompan, 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

Pitta Pradhana Vyadhi, also known as Pandu Roga, is in charge of the body's natural color; when it deteriorates, Panduta (pallor) results. Vata Dosha is also important in the manifestation of Pandu Roga, even if Pitta is the Pradhana Dosha. Specifically, Vyana Vayu has a relationship with the Samprapti of Pandu Roga. Many people suffer from Pandu, a Rasavaha Srotas Vyadhi.

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, Rokshyam and Shram which indicate its future presence. Also in Charak Samhita Samanya and Visheshrupa of Pandu Roga is mentioned. Although Pandu is Sadhya Roga, it develops some difficulties in later stages because of chronicity. As a result, early intervention is required. In Sadhya Pandu Roga, Acharya Charak advised that Teekshna Vaman and Virechan be medicated. A doctor needs to be fully versed in Pandu Roga via various Samhitas in order to diagnose and cure patients.

5. CONCLUSION

Many people with Pandu Vyadhi are encountered these days as a result of modern lifestyle choices, routinely bad eating habits, and the use of contemporary medications. The

Varnopalakshita and Pitta Pradhana Vyadhi, Pandu, is in charge of the body's natural color. Anaemia and pandu are connected. Pandu Roga and Chikitsa are described in great detail in Ayurvedic literature. A doctor must be fully versed in all facets of Pandu, including Roopa, Poorvaroopa, Samprapti, and many Chikitsa Yogas, Sadhyaasadhyta, Arishtalakshan, and other aspects from all Samithas, Nighantu, and other literature, in order to cure a Pandu Rogi.

REFERENCES

1. Agnivesh, Kashinath Shastri, Gorakhnath Chaturvedi, Re-edition, Varanasi; Chaukhambha Bharati Academy. 2004; II (16/4): 487.
2. Ambika Datta Shastri, Sushrut Samhita, Uttara Tantra, 7th Edition, Varanasi: Chaukhambha Sanskrit Sansthan, 1990; 286.
3. Pandey Ajay Kumar, Textbook of Kayachikitsa, First Edition, New Delhi; Chaukhambha Publications, 2019; 2(2): 167.
4. Urvi R. Dave, Anup Thakar. A clinical study of Panduroga w.s.r. to Iron Deficiency Anaemia and its management with Dhatriyarihta and Pandughna Vati. July-2015; 3(7): 1917.
5. Ralston H. Stuart et.al. Davidson's – Principle and Practice of Medicine, Edited by Christopher Haslett; 23rd Edition; Churchill Livingstone Elsevier Publication 2018, 923.
6. G Ramadevi, S Jonah, UN Prasad. A clinical study on the effect of Dhatri Lauha in Garbhini Pandu (I.D.A.) Int. J. Res. Ayurveda Pharma. 2014; 5(6); 708-712.
7. Parthibhan P, Chilambuselvi P, Sasireka R, Samraj K. Evaluation of haematinic activity of the Siddha Drug Pitha Pandu Maathirai on Phenyl Hydrazine induced Anaemic Rats International Journal of Research in Pharmacy and Biosciences. August 2015; 2(7): 23-27.
8. Kawaljit K. Anaemia 'a silent killer' among women in India: Present scenario. European Journal of Zoological Research. 2014; 3(1): 32-36.
9. Malhotra P, Kumari S, Kumar R, Varma S. Prevalence of Anaemia in adult rural population of North India. Journal of the Association of Physicians of India Jan. 2004; 52: 18-20.

10. Pandey Ajay Kumar, Textbook of Kayachikitsa, First Edition ; New Delhi; Chaukhmbha Publications; 2019; page no. 167.
11. Taranath Tarkavachaspati. Shabdasthome Mahanidhi. Veedanyantra Press, Calcutta 1976.
12. Pandey Ajay Kumar, Textbook of Kayachikitsa, Vol. 2, Chapter 2, First Edition. New Delhi; Chaukhmbha Publications, 2019; 168.
13. Shastri Ambikadatta, Susruta Samhita, Ayurvedatatva Sandeepika Hindi commentary. Chaukhambha Sanskrit Sansthan, Varanasi; reprint edition. 2014; II (44/15): 365.
14. Ambika Datta Sastry, Sushruta Samhita, Uttara tantra, 7th Edition, Varanasi: Chaukhambha Sanskrit Sansthan, 1990; 286.
15. Rani Khushboo, Gujarwar Vidula, Gujarwar Shriniwas; Acta Scientific Nutritional Health, "Mridabhakshanjanya Pandu-Review Article. 2019; 3(4): 66-69.
16. Shastri S.N. Panduroga Chikitsa Adhyayah". In Charak Samhita 1st edition. Varanasi, IN: Chaukhamba Bharati Academy. 2013; 2: 486.
17. Shastri A. D. Pandurogpratishedhoupkram Varnan Susruta Samhita Part II. Varanasi: Chaukhamba Sanskrit Sansthan. 2013; 365.
18. Tripathi Pt. Harihara Prasad. Harita Samhita Hindi Vyakhya Sahita, Tritiya Sthana, Chapter; 2nd Edition; Varanasi: Chuakhambha Krishna Das Academy, . 2009; 21: 358.
19. Agnivesha, Charaka, Dridhabala, Pt. Kashinatha Shastri and G. Pandeya. Charaka Samhita, Vidhyotini Hindi commentary, Chikitsa Sthana,16/7-9; 6th edition; Varanasi; Chaukhamba Sanskrit Sansthan; 2000; 415.
20. Shastri Ambikadatta, Susruta Samhita, Ayurvedatatva Sandeepika Hindi commentary. Chaukhambha Sanskrit sansthan, Varanasi; reprint edition. 2014; II (44/3): 364.
21. Agnivesha, Charaka, Dridhabala, Pt. Kashinatha Shastri and G. Pandeya; Charaka Samhita, Vidhyotini Hindi commentary, Chikitsa Sthana,16/12, Chaukhamba Sanskrit Sansthan, 6th edition 2000; 416.
22. Sushruta A. Shastri, Sushruta Samhita, Ayurvedatatva Sandeepika Hindi commentary, Uttartantra 44/5, Chaukhambha Bharti Academy, Varanasi, Reprint. 2013; 366.
23. Agnivesha, Charaka, Dridhabala, Pt. Kashinatha Shastri and G. Pandeya; Charaka Samhita, Vidhyotini Hindi commentary, Chikitsa Sthana, Chaukhamba Sanskrit Sansthan, 6th edition. 2000; 16/13-16: 416.

24. Agnivesh, Charaka, Dridhabala, Pt. Kashinatha Shastri and G. Pandeya; Charaka Samhita, Vidhyotini Hindi commentary, Chikitsa Sthana, Chaukhamba Sanskrit Sansthan, 6th edition. 2000; 16/3; 414.
25. Agnivesha, Charaka, Dridhabala, Pt. Kashinatha Shastri and G. Pandeya; Charaka Samhita, Vidhyotini Hindi commentary, Chikitsa Sthana, Chaukhamba Sanskrit Sansthan, 6th edition. 2000; 16/19-22: 417- 418.
26. Agnivesha, Charaka, Dridhabala, Pt. Kashinatha Shastri and G. Pandeya; Charaka Samhita, Vidhyotini Hindi commentary, Chikitsa Sthana, Chaukhamba Sanskrit Sansthan, 6th edition. 2000; 16/9-11; 415.
27. Byadgi S. Parameswarappa, Textbook of Vikriti Vijnana & Roga Vijnana, Chaukhmbha Publications, New Delhi, Reprint Edition. 2019; 2(1/17): 64.
28. Tripathi Brahmanand, Charaka Samhita, Hindi commentary, Chaukhambha Surbharati Prakashan, Varanasi. 2015; II (16/31-32): 595.
29. Tripathi Brahmanand, Charaka Samhita, Hindi commentary, Chaukhambha Surbharati prakashan, Varanasi. 2015; II (16/41-42): 598.
30. Shastri Ambikadatta, Sushruta Samhita, Ayurvedatatva Sandeepika Hindi commentary. Chaukhambha Sanskrit Sansthan, Varanasi; reprint edition 2014; II (44/20): 373.