



A Literary Review on *Pandu* w.s.r. Anemia and its *Ayurvedic* Management

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ABSTRACT

Anemia is a prevalent micronutrient disorder that has an impact on the health of a sizable portion of the global population. Anemia is most often caused by an iron shortage. The pallor on the skin, which is produced by a quantitative and qualitative shortage of *Raktu Dhatu* (blood tissue), either in the form of a lack of haemoglobin and/or red blood cells, is a major diagnostic characteristic of *Pandu Roga* (RBCs). The condition is known as *Pandu Roga* because *Panduta* (pallor) is considered to be the primary symptom. Diseases are characterized by skin pigmentation, *Pitta*, and the presence of *Ketaki Dhuli Nibha Chaya*¹. It was referred to as "*Varnopalakshita roga*" in *Ayurveda*, which denotes a condition distinguished by a change in color. Because to the similarity in the clinical signs and symptoms, the *Ayurveda* illness of *Pandu* and the anemia described in modern medicine might be connected.

Keywords: *Pandu*, *Vyadhi*, *Ayurveda*, Anaemia, pallor

INTRODUCTION

Ayurveda is the finest treatment option for the problems that are prevalent in today's world. *Ayurveda* is referred as the "Science of Life," It is one of the earliest medical systems. *Pandu* has been described as a white colour mixed with yellowish tinge by *Amarakosha*². *Pandu Roga* is one of several illnesses that have developed as a result of malnutrition, either as a result of poor caloric intake or a lack of a balanced diet and population expansion in today's modern world. According to *Ayurveda*, *Pandu* is a *Pitta Pradhana Vyadhi* connected to *Rasa* and *Rakta Dhatu*. *Acharya Charaka* says that, *Pandu* is the disorder of *Rasavaha Srota*³. According to *Maharshi Sushruta Raktavahasroto viddha Lakshana* and *Rasadoshaja Vikara*⁴⁵. Disease is primarily strongly affected by *Dhatu* nutrition because of *Pitta Prakopaka Ahara*⁶. The most common nutritional deficiency condition worldwide is *anemia*.

NIDAN –

There are three categories below can be used to classify the *Nidana* of *Pandu Roga*-

- (1) *Aharaja Nidana*
- (2) *Viharaja Nidana*
- (3) *Nidanarthakara Roga*

(1) *Aharaja Nidana*-

Acharya Charaka has outlined the following etiological elements with reference to *Ahara*-

- Consuming excessive amounts of *Kshara*, *Amla*, *Lavana*, and *Athi Ushna Anna*.

¹ Brahmanand Tripathi. Varanasi: Chaukhambha Surbharati Prakashan; 1997. Hindi Commentator, Charaka Samhita.

² Amarasinhma. Amarakosha Ed. By Ramashrami, New Delhi, Rashtriya Samskrita Samsthan, 2003; 268

³ Agnivesha, Charaka, Dridhabala, Charaka Samhita, Sutrasthana 28/10, ed. Vd. Yadavaji Trikamaji Acharya, Reprint Edition, Varanasi, Chaukhamba Surbharati Prakashan, 2014; 179

⁴ Ibidem(2) Sushruta Samhita, Sutra Sthana 24/9; 116

⁵ Sushruta, Sushruta Samhita, Sutra Sthana 14/30, edited by Vaidya Jadavji Trikamaji Acharya, Varanasi, Chaukhamba Surbharati Prakashan, 2014; 65

⁶ Agnivesh, Kashinath Shastri, Gorakhnath Chaturvedi, Vol. II, Re-edition, Chap. 16/4, Varanasi; Chaukhambha Bharati Academy, 2004; 487

- *Virrudha Bhojana*.
- *Asatmya Bhojana*.
- Overconsumption of *Nispava, Masha, Pinyaka, and Tila tail excessive use of Madhya, Mridbhakshana*, consuming too much *Kashya Katu Rasa*.

(2) *Viharaja Nidana* –

Acharya Charaka has outlined the following etiological elements with reference to *Vihara-*

- Even before the food is not thoroughly digested, sleeping, exercising, and having sex (*Vidagdhe Anne Diwaswapna, Vyayama, and Vyavaya*)
- Controlling instinctual desires (*Vega Vidharana*)
- Mental illness involving *Shoka, Kama, Chinta, Bhaya, and Krodha*
- Inadequate application of *Pancha Karma* Therapies (*Pratikarma*)
- Violating the seasonal schedule as directed (*Ritu – Vaishmaya*)

(3) *Nidanarthakara Roga-*

Pandu Roga is mentioned in *Ayurvedic* literature as either an *Upadrava Rupa* or as a symptom of any ailments. *Nidanarthakara Roga* is another name for this condition. In consideration of this, all of these illnesses can be categorised as *Nidanarthakara Rogas* of *Pandu Roga*.

The following are a few of them: *Raktarsha, Kaphaja Arsha, Raktarbuda, Raktapradara, Sannipatodara, and Upadrava of Raktapitta*.

PURVARUPA

The term "*Purvarupa*" refers to symptoms that arise before the disease really develops.

According to *Acharya Charak*:

"*TasyaLingam Bhavishyath Hridayaspandanam Rokshyam Swedabhavah Shramsathata*"⁷.

(*Ch. Chi. 16/12*)

Hridayaspandanam (Palpitation), *Rokshyam* (dryness of the skin), *Swedabhavah* (absence of sweating), *Shramsathata* (fatigue)

According to *Acharya Sushruta*:⁸

"*Twakspnotnam Shthevangatrasadoo Mridbhakshanam Prekshankootsothah. Vidmutrapitatwamathaavipako Bhavishtasya Purahsarani*". (*Su.U. 44/5*)

Twakspnotnam (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*.

RUPA

Rupa is the name of *Vyakta Purvarupa*. *Rupa* first occurs in the fifth *Kriyakala* of the health issues, or the *Vyaktavastha*. This is the definitive stage of the illness, when all of its defining signs and symptoms appear, making it easily identifiable.

According to the *Dosha* presence, chapter 16 of *Chikitsa Sthaan* by *Acharya Charak* mentions the *Samanya* and *Vishesh rupa* of *Pandu Roga*. It is referred to below-

Samanya Rupa⁹:

- Loss of *Indriye Bala, Tej, Veerya* and *Oja*.
- Loss of *Bala, Varna* and *Agni* (power of digestion).
- *Karnashveda* (tinnitus), *Durbalya* (general weakness), *Annadweshya* (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)

⁷ Agnivesh, Charaka, Dradhhabala, Pt. Kashinatha Shastri and G. Pandeya; Charaka Samhita, Vidhyotini Hindi commentary, Chikitsa Sthana, 16/12, Chaukhamba Sanskrit Sansthan, 6th edition 2000, p.416

⁸ Sushruta, A. Shastri, Sushruta Samhita, Ayurvedtatva Sandipika Hindi commentary, Uttartantra 44/5, Chakhambha Bharti Academy, Varanasi, Reprint 2013, p.366

⁹ Agnivesh, Charaka, Dradhhabala, Pt. Kashinatha Shastri and G. Pandeya; Charaka Samhita, Vidhyotini Hindi commentary, Chikitsa Sthana, 16/13-16, Chaukhamba Sanskrit Sansthan, 6th edition 2000, p.416.

- *Kopana* (dislikes cold things), *Nidralu* (feeling of drowsiness), *Alpawaka* (avoid speaking), *Shtheevan* (spitting frequently)
- *Pindikodweshthana* (calf muscle pain), *KatiuruPaad Ruka* (pain and weakness in the lumbar, thighs and feet), *Arohaneayasa* (patient feels exhausted on climbing)

Vishishta Rupa¹⁰:

- *Acharya Charaka* has classified the *Pandu Roga* of 5 types-

(1) *Vataja Pandu Roga*

(2) *Pittaja Pandu Roga*

(3) *Kaphaja Pandu Roga*

(4) *Tridoshaja Pandu Roga*

(5) *Mridbhakshanaja Pandu Roga*

1. 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), *Parshvashiroruja* (pain in chest-head), *Varchashosh* (dryness of stool), *Aashyavairasya* (distaste in mouth), *Shopha* (edema over body parts), *Aanah* (constipation), *Bala-Kshaya* (weakness).

2. 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), *Katukasya* (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), *Bhinnvarcha* (diarrhea)

3. 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).

4. Tridoshaja Pandu: -

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

5. Mridbhakshanajanya Pandu: -

Bala-Varna-Agni Nash (loss of strength, complexion, digestion metabolism), *Ganda-Akshikuta-BhruPad-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)

- According to *Acharya Sushruta*, *Mridbhakshanaja Pandu* wasn't included in the classification. because in his perspective. The *Sannipatika* variation of *Pandu* includes the *Mridbhakshana*-caused variety.
- *Acharya Harita* mentioned eight types of *Pandu* in *Harita Samhita* and described *Kamla, Kumbhakamla, Halimaka* as their Synonyms¹¹.

SAMPRAPTI¹² (PATHOGENESIS)

In *Chikitsa Sthan*, *Acharya Charaka* mentions the *Samprapti* of *Pandu*. He asserts that *Sadhak Pitta*, which is located in the *Hridaya* and is worsened by *Nidana, Pitta* consumption, is ejected from the *Hridaya* by strong *Vata*, where it enters the *Dash Dhamanya* (connected to the heart) and circulates throughout the body. It causes the vitiation in *Kapha, Vata, Asrika, Twaka*, and *Mamsa* when exacerbated *Pitta* enters the area between skin and muscle tissue.

This results in the skin developing odd colorations as *Pandu, Haridra*, and *Harita*.

¹⁰ Agnivesh, Charaka, Dradhabela, Pt. Kashinatha Shastri and G. Pandeya; Charaka Samhita, Vidhyotini Hindi commentary, Chikitsa Sthana, 16/3, Chaukhamba Sanskrit Sansthan, 6th edition 2000, p.414.

¹¹ Tripathi Pt. Harihara Prasad Harita Samhita Hari Hindi Vyakhya Sahita, Varanasi, Chaukhambha Krishna Das Academy, 2nd Edition, 2009, Tritiya Sthana, Chapter 21, Pg. 358)

¹² Agnivesh, Charaka, Dradhabela, Pt. Kashinatha Shastri and G. Pandeya; Charaka Samhita, Vidhyotini Hindi commentary, Chikitsa Sthana, 16/9-11, Chaukhamba Sanskrit Sansthan, 6th edition 2000, p.415.

SAMPRAPTI GHATAKA¹³:

- *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*
- *Adhishthana - Twaka Mamsa Abhyantara*
- *Vyaktasthaan - Twaka*
- *Sancharasthaan – Twaka & Mamsa*
- *Svabhav – Chirkari*

SADHYA-ASADHYATVA:

Patient with chronic *Pandu Roga* who is persistently suffered from this disease and whose *Dhatu* is not cured by *Khara*, gets *oedema* and notices that everything is yellow in shade.

Shotha develops as *Bala* and *Varna* decline and *Sharir Dhatus* changes into *Ruksha*. In addition to becoming *Deena* and experiencing *Murcha* and *Trushna*, *Rogi* has constipated and passes loose faeces that are coloured green¹⁴.

CHIKITSA:

- According to *Acharya Charak*

“*Tatra Panduvamyi Snigdhatteekshnaurdhvaaranulomikeh Sansodhyo Mriduvitikeeh Kaamli Tu Viraichne*”.

(Ch.Ch.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)

Vaman and *Virechan* should remove the *Dosha* that accumulates in the *Dhatus*, *Srotas*, and *Ashayas* in *Pandu Roga* frequently; if they don't, then *Shotha* is caused by these *Doshas* in various body parts.

- *Nidana Parivarjana* (Avoidance of aetiological factors)
- *Snehana* (Oleation therapy) and *Swedana* (Fomentation therapy)
- *Shodhana* (Eliminating the factors responsible for producing the disease).
- *Shamana* (Palliative treatment) to correct the deficiency and disorder.
- *Snehana Karma*: Since the *Doshas* adhere to *Shakhas* in *Pandu Rogi* due to *Sneha- Abhava* (deficiency), *Snehan* is necessary to bring the *Doshas* into *Koshtha* and eliminate *Rukshata*.

¹³ Byadgi S. Parameswarappa, Textbook Of Vikrti Vijnana & Roga Vijnana, Vol.2, Chapter 1/17, Chaukhmbha Publications, New Delhi, Reprint Edition 2019 P-64

¹⁴ Tripathi Brahmanand, Charaka Samhita, Hindi commentary, Vol. II, Chap. 16/31-32, Chaukhambha Surbharati prakashan, Varanasi; 2015; p-595

For *Snehana Karma*, various preparations have been mentioned in *Ayurvedic* text. For example, *Rajnighrita*, *Triphala Ghrita*, *Tilavaka Ghrita*, *Dadima Ghrita*, *Danti Ghrita*, *Draksha Ghrita*, *Panchgavya Ghrita*, *Mahatikta Ghrita*, *Panchatikta Ghrita* etc.

- *Swedan* – is done to bring the *Doshas* into *Koshtha*.
- *Vamana* and *Virechana Karma*: *Samyaka Snehan* 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*.
- *Shaman*

<i>Ghrita</i>	<i>Ras Aushadha</i>	<i>Asava/Arishtha</i>
<i>Rajnighrita</i>	<i>Navayas lauha</i>	<i>Vidangasava</i>
<i>Triphala Ghrita,</i>	<i>Dhatri lauha</i>	<i>Lauhasava</i>
<i>Danti Ghrita,</i>	<i>Vidangadi lauha</i>	<i>Drakshasava</i>
<i>Draksha Ghrita</i>	<i>Mandura Bhasma</i>	<i>Draksharishtha</i>
<i>Dadima Ghrita,</i>	<i>Lauha Bhasma</i>	
<i>Tilavaka Ghrita</i>	<i>Punarnava Mandura</i>	

UPADRAVA:

According to

Acharya Sushruta Aruchi, *Pipasa*, *Vaman*, *Jwara*, *Murdharuja*, *Agnisada Shopha*, *Kanthagata Abalatwa*, *Murcchha*, *Klama* and *Hrudayapidana* are the *Updrava* of *Pandu Roga*¹⁵.

PATHYA-APATHYA

➤ *Pathyahara:*

According to *Acharya Charak*¹⁶:

- *Shalianna*, *Yava*, *Godhoom* mixed with *Yusha* prepared from *Mudga*, *Adhaki* and *Masur*
- *Jangal Mamsa Rasa*

According to *Acharya Susruta*:

- *Pandu Rogi* must use *Arishtha* 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.

Apathyahara:

In *Bhaisajya Ratnavali* following *Apathya Aahar* are mentioned¹⁷:

- *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).

ARISHTA LAKSHANA¹⁸

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

- *Pandu Dhantnakha*
- *Pandu Netra*
- *Pandu Shangtadarshi*

¹⁵ Shastri ambikadatta, susruta samhita, ayurveda tatvasandipika Hindi commentary, Vol. II, Chp. 44/15, Chaukhambha Sanskrit sansthan, Varanasi; reprint edition 2014; p-371

¹⁶ Tripathi Brahmanand, Charaka Samhita, Hindi commentary, Vol. II, Chap. 16/41-42, Chaukhambha Surbharati prakashan, Varanasi; 2015; p-598

¹⁷ Shastri Ambikadatta; Bhaisajyaratnavali Vidyotni Hindi Commentary Chaukhamba Sanskrit Sansthan Varanasi Chapter,12 P-277

¹⁸ Sharma Anantram, susruta samhita, susrutavimarsini Hindi commentary, Vol. I, Chap. 33/23, Chaukhambha Surbharti prakashan, Varanasi; edition 2013; p-262

DISCUSSION

Samhitas include extensive descriptions of the causes of *Pandu*. *Diwasvapa*, *Viruddha Bhojana* and *Krodha* in accordance with *Acharya Sushruta*, vitiate *Rakta*. *Acharya Charaka* has mentioned *Pandu Roga* caused by suppression of *Chhardi*, *Vegavarodha*, *Viruddha Anna Sevana* and of excessive use of *Amla* and *Lavana Rasa*¹⁹.

They also said that the vitiation of *Pitta Dosha* is caused by *Krodha*, *Shoka*, *Bhaya*, *Vidagdha Anna Sevana*, *Ati Maithuna*, and *Tila Tail and Pinyaka*.

Vata Prakopa is reached through doing *Ati Adhvagamana*, *Ratrijarana*, *Nidranasha*, *Ativyavaya* and *Ativyayama*.

CONCLUSION

Anaemia is very common in India and iron deficiency is the commonest nutritional deficiency all over the world. According to WHO, over one third of the world's population suffers from anaemia, mostly due to iron deficiency. India continues to be one of the countries with very high prevalence. In *Pandu*, Majority of *Nidanas* are *Pitta* and *Rakta Prakopaka*. *Nidana Panchak* is an excellent instrument for identifying a disease at different phases, in which a disease manifests and in each of which each phase has its own significance for the treatment and the prognosis of the disease. Any ailment can be effectively treated with *Nidana Parivarjana*. The *Pandu*, which will be the first stage in the treatment of sickness, may also be done using this method. Furthermore, therapy should be administered in accordance with *Dosha* conditions²⁰.

CONCLUSION-

It is evident from the aforementioned article that the main characteristic of *Pandu Roga* is the prevalence of pallor across the body. The majority of *Nidanas* are *Rakta Prakopakas* and *Pitta*. These *Nidanas* lead to *Mandagni* and *Rasavahasrotodusti*, which in turn reduce the amount of *Posaka* produced by the *Rasadhatu* and lead to the depletion of *Rakta* and, finally, *Raktalpata*. In the second kind of pathogenesis, *Hridaya's Prakupita Pitta* is ejected by strong *Vata* through *Dasa Dhamani*, which further vitiates *Vata*, *Rakta*, *Kapha*, *Twak*, and *Mamsa* and leads to *Pandu Varnata* and, finally, *Pandu Roga*. The primary manifestations of *Pandu Roga* are *Rasavaha* and *Raktavaha Srotas*. In acute stage all *Pandu Roga* are curable or manageable but in chronic stage they are incurable. So *Pathya* and *Apathya* should be followed in early stage. Each component of *Nidana Panchak* individually as well as collectively helps in diagnosis of disease.

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¹⁹ Charaka Samhita, Chikitsasthana 16/7,8; 527

²⁰ Charaka Samhita, Chikitsasthana 16/ 42; 528

13. Byadgi S. Parameswarappa, Textbook Of Vikrti Vijnana & Roga Vijnana, Vol.2, Chapter 1/17, Chaukhmbha Publications, New Delhi, Reprint Edition 2019 P-64
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