

CONCEPTUAL STUDY ON MANAGEMENT OF PANDU

Balaji G. R.*¹, Dr. Waheeda Banu² and Dr. Ravindra Bhat³

¹PG Scholar, Department of P.G Studies in Kayachikitsa, Karnataka Ayurveda Medical College and Hospital, Mangalore, D.K District, Karnataka, India.

²HOD & Professor, Department of P.G Studies in Kayachikitsa, Karnataka Ayurveda Medical College and Hospital, Mangalore, D.K District, Karnataka, India.

³Professor, Department of P.G Studies in Kayachikitsa, Karnataka Ayurveda Medical College and Hospital, Mangalore, D.K District, Karnataka, India.

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*Corresponding Author: Balaji G. R.

PG Scholar, Department of P.G Studies in Kayachikitsa, Karnataka Ayurveda Medical College and Hospital, Mangalore, D.K District, Karnataka, India.

ABSTRACT

The 21st century has seen a fairly rapid change in lifestyle. Dietary habits are evolving quickly in tandem with the way of life in society. People often eat fast food these days, and they also neglect to take care of their health. As a result, people develop a variety of illnesses. One of these illnesses, called "Pandu Roga," is quite widespread, especially in developing nations like India. Pandu Roga is described by all Acharyas of Ayurveda as this disease with its own pathogenesis and treatment according to the modern science it can be co-related with Anemia. The word 'Pandu' denotes Pale or yellowish white colour according to ayurveda. Panduroga (anaemia) is a disease in which person becomes Pallor due to inadequacy of Rakta dhatu (blood) in the body. Rakta dhatu is one among the Saptadhatus of the body. Importance of Panduroga and a comparison regarding its Nidana-Samprapti, Lakshanas, Upadravas and Chikitsa etc. as found in Mahabharata, vedic kala,purnana kala ,Charaka Samhita, Sushruta Samhita, Ashtanga Sangraha, Ashtanga Hridayam, are being presented in this article.

KEYWORD: Pandu roga, IDA, Anemia.

INTRODUCTION

The word 'Pandu' denotes pale – white or yellowish – white colour. Panduroga is a disease in which man become pale. The word Pandu become more familiar ever since this was found in Mahabharatha,^[1] one of the two great epics of India.

In Ayurveda there are seven important constituents viz. Rasa, Rakta, Mamsa, Medo, Asthi Majja, and Sukra in the human body. Amongst them Rakta (Blood) is a very important dhatu. Acharya Sushruta has mentioned Rakta dhatu as fourth dosha of the body i.e in additional to three dosha viz, Vata,Pitta ,Kapha.^[2] He mentions that Rakta is the life in the living body. Therefore it should be protected from all types of vitiation and pathogenic factors.^[3] Pandu roga starts due to deficiency of blood. If it is not approach in appropriate time can lead to Kamala (Jaundice) and turns to be incurable. Rakta has been considered as a key factor for the Jeevana, Prinana, Dharana and Poshana karma of the body. Many times it is seen that rakta gets vitiated by Doshas, mainly by Pitta

dosha as Rakta is pittavarigya and disease like pandu appear. In Ayurveda pandu considered as specific disease with its own pathogenesis and treatment⁴. Same as Ayurveda in modern science Anemia is a blood disorder characterized by abnormally low levels of healthy RBCs or reduced level of hemoglobin (Hb), The reduction of any or all of these blood parameters reduces the essential delivery of oxygen through the bloodstream to the organs of the body. Iron is a mineral found in the blood stream that is essential for growth, enzyme development and function, a healthy immune system, energy level, and muscle strength. it is an important component of hemoglobin and myoglobin, the type of hemoglobin in muscle tissue.

Regarding the aetiology, types, symptoms, complication and treatment of pandu roga a comparative study has been done based on Mahabharata, Charaka Samhita, Susruta Samhita Astanga Hridaya, Astanga Sangraha, Madava Nidana Bhavaprakasa. In addition to this use of louha (Iron) in treatment of pandu also mentioned.

AIMS AND OBJECTIVES

To study in detail about pandu

MATERIALS AND METHODS

Source of data

1. Classical text books of Ayurveda
2. Texts books of Modern science
3. Published article from periodical journals and their magazines.

Review on Pandu Roga

Vyutpatthi & Nirukti

Pandu is derived from root Padi Nasane with suffix “k... and elaborated through “in”^[5].

In amarakosha and shabdakalpadurma described that pandu varna is combination of Shwetha (white) and peetha (yellow)

Pariyaya

Acharyas had described pandu vyadhi in various paryayas which mainly based on the colour.^[6]

They are

- Pandu
- Kamala
- Lagharaka
- Alasakshya
- Panaki
- Haridra
- Kumbhava

Paribhasha of Pandu

The term pandu is explain widely in classics pandu bhava pandu roga,^[7] pandu varna,^[8] pandutva,^[9] Harita, Harita Varna.

It is evident that all the texts highlighted the colour in defining the pandu roga and for diagnosis and differential diagnosis.

Nidana

Nidana is the most important as the nidana parivarjana it self forms the first and foremost line of treatment.

Pandu roga nidana can be divided in to four types

1. Aharaja nidana
2. Viharaja nidana
3. Nidanarthaka roga

Aharaja nidana

Acharya charaka has decribed following etioloical factors regarding ahara as intake excees quantity kshara (Alkaline), Amla, lavana,atiushna,virudha ahara, asatmya ahara, Foods like masa, pinyaka, tilataila.^[10]

Acharaya susruta has described intake of Intake of amla,Lavana,Madya,Mritth,Tiksna regularly.

Viharaja nidana

All acharyas has mentioned Maithuna, vegadharana, Rutuvaishamy, Divaswapna, Ativyayama.^[11]

Manasika Karana: Kama,Krodha,chinta,bhaya,shoka.

Chikitsa Apacharja: pratikarma,(improper administration of panchakarma treatment)

Nidanarthakara roga

Pandu roga has been indicated either symptom of any disease or as rupa upadrava in ayurveda literature sa all these can be considered as nidanarthaka rogas of pandu. Raktagulma, pleehodara, asrudhara, raktasrava, pureeshaja krimi.^[12]

Poovaroopa

Those signs and symptoms which appear earlier to the actual disease.

Charaka,^[13] mentioned hridaya spandanaadhikya (palpitation), roukshyam(dryness) swedabhava(absence of sweating) shrama (fatigue) Susrutha,^[14] mentioned Twaksphotana, steevana, Gatrasada, Mrid Bhaksha iccha, Avipaka, Mootra peetata Vagbhata,^[15] mentioned Hridaya spandana, Aruchi, Peeta mutrata, Swedaabhava, sheerna lomata.

RUPA

The poorva roopa which has attained vyaktavastha is known as roopa. These stage occurs when dosha dushya sammurchuna has completed and the disease has manifested with full of its symptoms.

Panduta, Alparakta, Dourbalya, Karshya, Karnakshweda, Gatrapeda, swasa, bhrama, Annadwesa, Jwara.

Bheda

Classification of pandu

Acharya Charaka had mentioned five (5) types of panduroga based on causative factors viz. 1) Vataja, 2) Pittaja, 3) Kaphaja. 4) Sannipataja (Tridoshaja) and Mritbhakshanajanyaja (Due to eating of soil/ earth).

1. **Vataja type of pandu roga:** present with Krishna Pandutva (blackish paleness)Ruksharunangata (roughness and reddishness of the body), Angamarda (body ache), Ruja (Pain), Toda (Piercing Pain), Kampa (trembling) Parshvasirorujah (Pain in sides of head), varchahsosh (dryness of stools), Vairasya (distate in the month), Sopha (oedema), Anaha (hardness in bowel) and Balakshaya (debility).
2. **Pittaja type of Panduroga:** Presents with Pita (yellow), Harita (greenish tinge), Jvara (fever) Daha (burning senation), Chardi (vomiting), Murcha (fating), Pipasa (thirst), Pita Mutra (yellowish urine), and Pita Shakru (yellowish stools) and Patient with Pittaja Pandu perspires profusely, may have desire for cold and aversion to food. He may have pungency in mouth, hot and sour things do not suit

him "Amla Udgara (acid eructations), Daurbalya (debility), Tama (feeling of darkness are also seen.

- 3. Kaphaja type of Panduroga :** presents with Gauravam (heavyness), Tandra (drowsiness), Chardi (vomiting), Svetavabhasata (whitish complexion), Praseka (excessive Salivation), Lomaharsha (horripilation), Sada (malaise), Murcha (fainting), Bhrama (giddiness), Klama (exhaustion), Svasa (dyspnoea), Kasa (cough), Alasya (lessitude), Aruchi (anorexia), Vaksvaragraha (obstruction in speech and voice), Shukla mutra (whitish urine), Shukla Akshi (whitish eyes), Shukla Varchasa (whitish stools) and desire for pungent, and hot things, Swayathu (swelling), Madhurasya (sweetness in mouth) etc.
- 4. Sanni Pataja (Tridoshaja):** In those who use all sorts of things, all doshas get vitiated and cause

Panduroga, which presents with all the above mentioned symptoms (Vataja, Pittaja and Kaphaja) and it is said to be very troublesome.

- 5. Mritbhakshana Janyaja:** It is due to habit of eating earth. Kashayarasa (astringent) of earth vitiates Vata, Kharaguna and Ksharaguna (rough and alkaline) vitiates Pitta, and Madhura rasa (sweet taste) vitiates Kapha In addition to this, earth obstructs the srotas (channels) without undergoing any change and destroys bala (strength), ojas (vigour) etc and produce Panduroga, which further destroy the Bala (strength), Varna (complexion) and Agni (digestive fire) of the man. Patients may suffer from swelling in cheeks, orbits, feet, navel, and genital parts, as well as krimiroga and Atisara (diarrhoea) with blood and mucus.

Types of Pandu Roga According to Different Texts.

TYPES	Charaka Samhita	Susruta Samhita	Ashtanga hridayam	Ashtanga sangraha	Madhava Nidana	Bhava Prakasha
Vataja	+	+	+	+	+	+
Pittaja	+	+	+	+	+	+
Kaphaja	+	+	+	+	+	+
Sannipataja	+	+	+	+	+	+
Mritbhakshana Janya	+	-	+	+	+	+

+ Mentioned

_ Not mentioned

Samprapthi

Due to foresaid Nidana (actiology) the aggravated Pitta dosha will be propelled by rakta in ten arteries which carry it to the whole body. This Pitta located in the space between tvak (Skin) and Mamsa (flesh) affects Kapha, Vata, Rakta, tvak and Mamsa etc. and thereby produces various shades of colours like pale yellow, deep yellow, and green in skin. This condition is known as 'Panduroga'.

Samprapthi Ghataka

Dosha: Pitta Pradana Tridosha

Dushya: Rasa, Raktha, Meda

Agni: Jaturagni Dushti(Mandagni)

Ama: Amaja Vyadhi

Srotas: Rasuvaha, Rakthavaha, Annavaha

Udbhava Sthana: Amashaya

Vyakta Sthana: Sarva Sharira

Sanchara Sthana: Dashadhamanis and Sarvasharira

Ashraya: Twak and Mamsa

Roga Marga: Bahya

Sadhya Asadhyata

The sadhyaasadhyata lakshanas of a disease helps to understanding the prognosis of the diseases.^[16]

According to Acharya Charaka

- When the disease becomes chronic (Chirotpanna)
- When excessive dryness has appeared in the patient. (Kharibhuta)

- When the patient is afflicted with oedema owing to chronicity of this disease. (Kalaprakarshat Shuno)
- When the patient gets yellow vision (Pitani Pashyati)
- When the patient is fully or partially constipated. (Baddha Alpa Vitaka)
- When the Patient passes loose stool which is green in color and which mixed with mucus (Sakapha Haita Atisara)
- When the patient feels exceedingly prostrated (Deena)
- When the body is exceedingly white as if besmeared (with whiteness) (Shwetatidigdhangam)
- When the patient is exceedingly afflicted with vomiting, fainting and morbidthirst. (Chhardi-Murchha - Trushardita)
- When the body of the patient becomes pale on account of loss of blood (Asrika Kshayad shwetatvam)^[17]

According to Acharya Sushruta

- When the patient is suffering from Jwara and Atisara.
- When the patient is afflicted with oedema in end organs e.g. hands, feet and face and emaciation in middle parts, and vice versa. (Anteshu Shunam, Parihin Madhyam and Anteshu Mlana; Madhya Shunam)
- When the teeth, nails and eyes of the patient

- (4) Has become Pandu and whose vision has also become pale.
 (5) When patient looks everything Pandu.^[18]

Upadrava

This is known as complication of the disease. This is defined as the signs, symptoms which appear as the latent feature. However the etiological factors remained the same. The complication arises out of the original signs and symptoms either in a grievous manner or as a violent form. If the disease is not treated then the following complications may arise

Aruchi (Anorexia), Pipasa (Thirst), Chardi (Vomiting), Jwara (Fever), Agnisada (Dyspepsia), Murdha-Ruja (Headache), Kanthagata Shotha (Oedema in throat), Abalatva (Weakness) Murchha (Fainting), Klama (Fatigue), Hridaya Pidana (Cardiac Pain), Shwasa (Breathlessness), Atisara (Diarrhoea), Kasa (Cough), Swarabheda (Obstruction of Speech)

Chikitsa

All the available Ayurvedic text envisage the management of pandu which can be classified under two head lines

- (1) Chikitsasutra which refers to the principle of pandu roga in general. They are shodana which include (snehana, swedana, vamana, virechana, abhyanga)
- (2) Shamana (different remedies to pandu)

Samanya chikitsa of pandu

Line of treatment in general

The patient suffering from Pandu Roga should be given emetic and purgative drugs for the shodhana of the body by the elimination of Doshas. After Shodhana, patient should be given wholesome food containing Old shali type of rice, Yava, Godhuma mixed with the Yusha of mudga, Adhaki and Masura. Mamsa Rasa of Jangala Animals. After that, specific medicines on the basis of the aggravated Doshas should be administered.^[19]

1) Shodhana

Snehana should be done prior to shodana

1. Snehana is done as
 - In Panduroga there is natural reduction in snelabhava of the body along with Rakthalpata Alpamediasakara, Nisxar Ojakshiny etc. Raukshatwa is appeared on whole body. Therefore there is great necessity of Snehana.
 - Due to Samyaka Snehana. Vatamelomana takes place. Agni comes to its normal stage, snigdha sarchaskata, snigahata and murdavala is also found out.
 - To bring back Sakhashrita Dotha to the Kashta

Eg. Kalyanaka Ghrita Panchagavyaghrita, Mahatlukda Ghrita, Triphala Ghrita

2. Swedana though contraindication in pandu roga mridu swedana,^[20] can be performed

3. Shodana

- Acharya Charaka has described the urdwa as well as adhostana in treatment of pandu roga
- The Shodana is to be assessed in those patient in which Vyadhibala, Rogibala and degree of srotorodha in mridbhakshnajanya pandu roga are in mucg severe form.

Shodana karmani: Urdhwa shodana i.e vamana Adhoshodana i.e virechana

This are expected shodana karmas in the disease panduroga.

1. Vamana:- Acharya charaka mentioned 'krutavedhana' for vamana karma in case of pandu

- The teekshna vamana is done
- Increased kapha vilayana
- According to dalhana acharya mridu vamana can be given in disease panduroga with respect to Ritu, Desa, Kala, Rogibala etc.

2. Virechana:- Virechana karma is indicated in the condition of

- Pitta predominance.
- Kapha in combination with pitta.
- Kapha migrated to pitta sthana.
- Vataja pandu – Snehabhooyista Dravya.
- Pittaja pandu – Tiktasheetala Dravya.
- Kaphaja pandu – Katutikta Ushna Dravyas.
- Sannipataja pandu- Mixed Dravyas Gomutraharithaki, Trivrithadi Choorna.

3. Abhyanga to

- Padasandhis
- 2 angulas below Nabhi

Shodhana is following by Shamana Oushadha and Pathya.

Shamana Chikitsa in Pandu Roga

Various preparation like Yoga with herbal, Yogas contain minerals, Yogas with herbomineral combination are used in Shamana Oushadi.

YOGAS

Dhatri Phala Rasa + Kshaudra
 Ikshu Rasa + Kshudra
 Mantha + Kshudra
 Yashtimadhu Kashaya + Madhu
 Yasthimadhu Churna + Madhu

Yogas contain minerals

Pravala + Mukta + Anjana + Shankha + Swarna Gairika
 Churna with Gomutra
 Akshakashta Dagdha Mandura Prayoga
 Saindhava Mandura Prayoga

Vishesha Chikitsa of Pandu Roga

Vishesha Chika is treating the disease according to the condition of the disease, Here Desha predominance

should be kept in mind. Various combinations of medicine are used according to the condition.

Vataja Pandu Roga: Sneha Kalpana is chiefly used.

Pittaja Pandu Roga: Tiktha Sheeta Oushadhis more used in such conditions.

Kaphaja Pandu Roga: Katu Raksha Ushna predominant Oushadhas are more advisable

Sannipataja Pandu Roga: treated with combination of above mentioned Oushadhas

Mrut Bakshanajanya Pandu Roga

Samshodana therapy is indicated in mrut Bhakshanajanya Pandu Roga. Here the Bala of the patient should be accessed while selecting the medicine especially while using Tikshme Oushadhas. Once the alimentary tract has been purified, strength bestowing medicated ghee recipes should be administered.

Ghee boiled with Sunti, Pippali, Maricha, Bilva, Haridra, Daruharidra Hareethaki, Bibethaki, Amalaki, Swethapura Rakthapanarnav, Mustha, Lolabhasma Pata, Vidonga, Devadors, Vrakikalt, Bhargi and milk should be appropriately taken by the patient who suffers from mrit Bakshanajanya Pandu Roga.

Special recipe for causing aversion to Mrut:

Mrut Bhavana with Vidanga, Ela, Ativisha, Nimbapatra, Pata, Varttika, Katukarohini, Murva and Kutaja are prescribed to create an aversion towards Mrut in the patient.

Pathyapathya

Pathya

A. Ahara

1. Shimbi Dhanya Varga: Mudg, Adhaki, Masura
2. Shali Dhanya Varga: Purana Shali
3. Suka Dhanya Varga: Purana Yava, Godhuma
4. Gorasa Varga: Takra, Ghrita, Navaneet
5. Mamsa Varga: Jangalamamsa, Matsya
6. Ikshu Varga: Ikshurasa
7. Kritanna Varga: Yusha
8. Madya Varga: Souviraka, Tushodaka
9. Anya Dravya: Haridra Chandana, Yavakshara, Lohabhasma
10. Shaka Varga: Patola, Kushmanda Jeevanti, Bimbi, Guduchi,
11. Phala Varga: Kadaliphala, Abhaya, Dhatri
12. Mootra Varga: Gomutra

B. Karma:- Vamana, Virechana Abhyana

Apathya

A. Ahara

1. Rasa: Kshara, Katu, Amla, Lavana
2. Anna: Viruddha Bhojana, Asatmaya Bhojana
3. Jala: Adhika Ambupana, Dushita Jalapana
4. Kritanna Varga: Pinnyaka
5. Shamidhanya Varga: Masha, Tila Kulata Nishpava
6. Sneha Varga: Tila Taila
7. Gorasa Varga: Dadhimasthu
8. Madhya Varga: Saktu

9. Ahara Varga: Hingu, Tambula, Teekshnapadarthas like Maricha, Vidhahi, and Atyushna padartas
10. Anya Dravya: Mrut

B. Vihara

1. Adhika Vyayama
 2. Adika Vyayama
 3. Krodha
 4. Agni and Atapa Ati Sevana
 5. Adika Marga Gamana
 6. Maithuna
- C. Karma
1. Rakta Sruti
 2. Dhoomapana
 3. Swedana
 4. Vamana Vega Dharana

CONCLUSION

Rakta is essential for a variety of physiological activities like nutrition transport, waste removal, oxygen carrying, thermoregulation etc. The ailments of vitiated blood effect organs such as heart, kidneys, and lungs, brain in particular and entire body in general. The Pitta pradhana tridosha along with Rasa and Rakta frames the whole samprapti further resulting in different symptomatology. As there are various references from the nidana to the treatment of Pandu in ayurvedic classics, this paves the path for the various research work in this field. This article will definitely be helpful for the references of pandu roga in ayurveda and be a foundation for the future research work in Pandu.

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