



Review Article

AN AYURVEDIC PERSPECTIVE OF PANDUROGA -A REVIEW

Pooja Badani^{1*}, Hitesh Vyas²

¹MD Scholar, ²Associate Professor, Department of Basic Principles, IPGT & RA, GAU, Jamnagar, India.

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ABSTRACT

Pandu Roga was well known to Indian people science since *Vedic* Period. It is described in full length by all the *Acharyas* of *Ayurveda* as a specific disease with its own Pathogenesis and treatment. In *Panduroga* change the color of the body like pallor of skin, sclera, nail, tongue etc. due to *Rakta-alpata* means Hemoglobin level decrease than the normal level. It is related with both important *Dhatu Rasa* and *Rakta*. We can correlate this disease to Anaemia in modern science. Anaemia is the world's second leading cause of disability and is responsible for about 1 million deaths a year. It is therefore important for *Ayurvedic* scholar to search scientific reason behind the disease. With this research interest the present study has been undertaken thoroughly review of *Panduroga*. Three general principles of treatment have been mentioned in *Charaka Samhita*. They are *Daivavyapashraya*, *Yuktivyapashraya* and *Satvawajya*. Here only *Yuktivyapashraya Chikitsa* has been mentioned. Single drugs which have been used in *Pandu* are - *Lauha Bhasma*, *Mandura Bhasma*, *Pure Kaseesa*, *Shilajita*, *Vardhamana Pippali* etc. Compound drugs which are of vegetable origin e.g. *Triphala*, *Phalatrikadi Kwatha*, *Punarnavashtaka Kwatha*, *Vidangavaleha* etc. Here also made some efforts to discuss every aspect of *Panduroga* in *Ayurvedic* point of view.

*Address for correspondence

Dr Pooja Badani

Final Year M. D. Scholar,
Department of basic principles,
I.P.G.T & R.A., G.A.U., Jamnagar,
Mob.- 7874846833
Email: pooja.g.badani@gmail.com

INTRODUCTION

Panduroga is known from the *Vedic* Period. This disease was described in ancient Hindu treaties like in *Ramayana*, *Mahabharata*, *Agnipurana*, *Garuda Purana* etc. In *Mahabharata*, *Pandu* has been described as the father of Five *Pandvas* and as the son of *Ved Vyasa*. *Pandu* has been described by the name of *Vilohita*. It is to be appreciated here that *Lohita* is the synonym of *Rakta Dhatu*. The term *Lohita* probably indicates the importance of *Lauha Dhatu* or Iron in its development. In *Garuda Purana*, there is a reference in which "*Takra*" mixed with *Lauha Churna* has been advocated for the treatment of *Pandu*.^[1] This shows that *Panduroga* was prevalent in that period and physicians were able to diagnose and treat it. It is therefore apparent that the use of Iron preparation for the treatment of *Panduroga* was well known since ancient times.

While describing the pathological aspect of the diseases, *Dhatu Pradoshaja Vikaras* have been mentioned. *Pandu* is the disease of *Rasavaha Srotas* according to *Charaka Samhita*^[2] and *Raktavahasrotoviddha Lakshana* and *Rasadoshaja Vikara* as per *Maharshi Sushruta*.^[3,4] Thus it is related with both important *Dhatu Rasa* and *Rakta* Principal function of both these *Dhatu* has been described as *Preenana* (providing nourishment) & *Jeevana* (life activity) *Karma*.^[5] This is how disease *Pandu* can be the choice of disease to assess the *Dhatuposhana Krama*.

Acharya Charaka described *Pandu* after *Grahanidosha Chikitsa* due to aggravation of *Pitta* in *Grahani*, and the aggravation of *Pitta* constitutes a predominant factor in the causation of *Pandu*. *Acharya Sushruta* has mentioned after *Hridaroga* due to Same *Samkhya Samprapti* and treatment of *Hridaroga* like *Tikshna*, *Amla*, *Katu* etc may cause for development of *Pandu*. *Acharya Vagbhata* mentioned after *Udararoga* due to Same *Doshasanghata*.

Pandutva has been mentioned as cardinal symptom of the disease which is related with the colour and complexion of the body. *Pandu* develops due to vitiation of *Bhrajaka Pitta* and *Rakta* which are mainly responsible for the *Prakrita Varna* of body. *Acharya Charaka* has mentioned the word "*Vaivarnaya*" in this regards. *Acharya Chakrapani* has described it as *Shweta*, *Dhusara*, *Shwetavabhasa*, *Peetavabhasa*. All of these opinions points towards various kind of discolouration of the body but not specifying any one particular colour like pallor.

Vyutapatti

The word "*Pandu*" is derived from root "*Padi-Nashane*" by adding "*Ku*" *Pratyaya* in it.

Pandu has been described as - A white colour mixed with yellowish tinge by *Amarakosha*.^[6]

According to *Vachaspatyam*^[7] *Pandu* is like whitish yellow colour of pollen grains of *Ketaki* Flower.

Monier William^[8] has taken Pallor from *Pandu Varna*.

After considering all these descriptions, one may find it difficult to decide about actual colour by "*Pandu Varna*" but if one gives a due consideration of *Samprapti* of *Pandu* given by *Acharya Charaka* who has mentioned that in *Pandu* there is *Kshaya* or loss of *Varna* or general complexion. *Acharya Charaka* has also mentioned the word "*Vaivarnaya*" in this regard. Commentator-*Gangadhara* has described it as *Mlana Varna*. All of these opinions of commentators points towards various kind of discolouration of the body but not specifying any one particular colour like pallor.

Nirukti of Panduroga

According to our Acharyas, among the different kinds of colours such as *Pandu*, *Haridra* and *Harita*, *Pandu* being more common among this so, disease is called as *Panduroga* itself.

Nidana: *Nidana* is most important as the avoidance of etiological factor forms the first and foremost line of treatment. *Nidana* of *Panduroga* can be classified into following three categories.

1. *Aharaja Nidana*
2. *Viharaja Nidana*
3. *Nidanarthakara Roga*

1. Aharaja Nidana

Acharya Charaka has described following etiological factors regarding *Ahara*.

- Excessive intake of *Kshara*, *Amla*, *Lavana*, *Ati Ushnaanna*, *Virruddha Bhojana*, *Asatmya Bhojana*.
- Excessive intake of *Nishpava*, *Masha*, *Pinyaka*, *Tilataila*.
- Excessive intake of *Madya*
- Excessive intake of *Kashaya*, *Katu Rasa*

2. Viharaja Nidana

According to *Acharya Charaka: Vidagdhe Anne Diwaswapna*, *Vyayama*, *Vyavaya*, *Vega Vidharana*, Affliction of mind with *Kama*, *Chinta*, *Bhaya*, *Krodha*, *Shoka*, *Pratikarmaritu* – *Vaishmaya* are the *Viharaja Nidanas*.

According to *Acharya Harita: Harita Samhita* described few new *Viharaja Nidana* and modified some of the *Nidana* of ancient texts. All these have been enlisted below.

- *Nidranasha* (Loss of sleep)
- *Atinidra* (Excessive sleep)
- *Avyayama* (Not doing any Exercise)
- *Atishrama* (Excessive exercise)
- *Snehavibrama*, *Snehatiyoga* and *Amatisara* have also been taken as the causes of this disease.

Manasa Nidana of *Panduroga Chinta*, *Bhaya*, *Krodha*, *Shoka* are described in different classical texts.

Nidanarthakara Roga: In *Ayurvedic* literature *Panduroga* has been indicated either as a symptom of many diseases or as *Upadrava*. So, all these diseases can

be considered as *Nidanarthakara Rogas* of *Panduroga*. Some of which are *Raktarsha*, *Kaphaja Arsha*, *Raktarbuda* etc. Following table presents *Nidanarthakara Roga* for *Panduroga* according to various classical texts.

Purvarupa: *Avipaka*, *AkshikutaShohta*, *Aruchi*, *Alpavahnita*, *Angasada*, *Gatrasada*, *Hridspandaman*, *Mutra Pitata*, *Mridbhakshanaechcha*, *Panduta*, *Rukshata*, *Swedabhava*, *Shrama*, *Sthivanadhikya*, *Twakasphutana*. It is to be noted that *Acharya Sushruta* has mentioned *Mrudabhakshanaechchha* as *Purvarupa* of *Pandu*. *Acharya Harita* has mentioned *Panduta* in the *Purvarupa* of *Pandu*.

Rupa: *Pratyatma Ling* of this disease is *Panduta* or *Pandubhava*, which is invariable feature. Various types of discolouration have mentioned by almost all *Acharyas*. They have also described *Rupa* in different types of *Panduroga*. *Pandu* doesn't occur only due to lack of *Rakta Dhatu* but along with it other *Dhatu*s also get vitiated due to aggravated *Dosha* in certain stage.

Samanya Rupa of Panduroga^[9,10]

Acharya Charaka and *Vagbhata* have mentioned the *Samanya Rupa* of *Pandu*. The following table shows different *Samanya Rupa* of *Panduroga*. *Akshikutashohta*, *Aruchi*, *Arohaneayasa*, *Alpawaka*, *Annadweshha*, *Balakshaya*, *Bhrama*, *Durbalya*, *Dhatugaurava*, *Dhatushithilya*, *Gatramarda*, *Gaurava*, *Hatanala*, *Hatprabhatva*, *Jwara*, *Kopana*, *Karnashweda*, *Katiurupadaruka*, *Medalpata*, *Nidraluta*, *Nisharata*, *Ojagunakshaya*, *Pindikodweshhana*, *Panduta*, *Raktalpata*, *Shishiradweshha*, *Shwasa*, *Shirnalomata*, *Sadana*, *Shrama*, *Sthivanadhikya*, *Shithilendriya*. These features communicate to that of *Mandagni*, *Rasa Kshaya*, *Rakta Kshaya* and their further consequences i.e. effects of deficient nourishment to other body tissue.

Classification of Panduroga

Acharya Sushruta has classified *Panduroga* in 4 varieties:

1. *Vataja Panduroga*
2. *Pittaja Panduroga*
3. *Kaphaja Panduroga*
4. *Tridoshaja Panduroga*

Acharya Charaka has mentioned one additional variety of *Panduroga* that is *Mrida Bhakshanjanya Pandu*. *Harita Samhita* has mentioned *Halimaka* and the two varieties of *Kosthashakhashrita Kamala* in the classification of *Pandu*. This addition brings up the number to eight varieties. However, some *Acharyas* opine that *Halimaka* and *Koshta Shakhasrita Kamala* are secondary to *Pandu* and cannot be included in disease. Similarly they also opine that *Mrid-bhakshanjanya Pandu* should not be treated as fifth variety but should be included within *Vatajadi* three varieties since *Mrid-bhakshanjanya Panduroga* comes into manifestation through the vitiation of *Vatajadi Dosha*. If viewed logically, the classification given by *Acharya Charaka* seems to be more rational and acceptable.

1. Vataja Panduroga

Due to *Vata* provoking diet and activity, the *Vata* gets provoked and *Pandu* occurs.

2. Pittaja Panduroga

After taking *Pitta Prakopaka Ahara-Vihara* *Pitta Dosh* gets vitiated and accumulated in the body of the person of *Pitta Prakriti*, vitiates the *Rasa & Rakta* along with *Mamsa Dhatu* and causes *Pittaja Panduroga*.

3. Kaphaja Pandu

Due to *Kapha* aggravating *Ahara* and *Vihara*, *Kapha* gets vitiated and causes *Kaphaja Pandu*.

4. Sannipataja Panduroga

In person who indulges in *Tridosha* vitiating *Ahara*, *Vihara*, all the three *Doshas* get simultaneously aggravated and causes *Tridoshaja Pandu*, which shows all the symptoms of *Vataja*, *Pittaja* and *Kaphaja Pandu*.

5. Mridbhakshanajanya Panduroga

Acharya Charaka, *Vagbhata* and *Madhava* have given this type of *Pandu* where *Mridbhakshana* stands as causative factor. The soil of *Madhura Rasa* vitiates the *Kapha Dosh*, the soil of *Lavana Rasa* vitiates the *Pitta Dosh* and the soil of *Kashaya Rasa* vitiates *Vata Dosh*. **Samprapati of Panduroga**

General *Samprapati* of *Panduroga* is as per *Acharya Charaka*:

When the *Pitta* located in its normal abode of heart, become expelled by the vitiated *Vayu*, into the *Dasha Dhamani* and is mobilized throughout the body. It gets localized in between the *Twak* and *Mamsa* and vitiates the *Kapha*, *Vata*, *Asrika*, *Twaka* and *Mamsa* subsequently causing a variety of colour in the skin such as *Pandu*, *Haridra*, *Harita* etc. This condition is known as *Panduroga*.

Acharya Sushruta has mentioned that *Pandu Bhava* is caused by vitiation of *Twak* through the vitiated *Rakta* in one who indulgence in *Ahita Ahara Vihara*.^[11] *Acharya Vagbhata* has mentioned the *Samprapati* given by *Acharya Charaka*.

The pathology of *Panduroga* is mainly concerned with vitiation of *Pitta* which in turn vitiates the *Rakta*, leading to condition of *Pandubhava*. Thus, *Pitta* being the *Pradhan Dosh* or main factor in the causation of *Panduroga*, all the fivefold functions of it are affected more or less, but as the main seat of the disorganization is the *Rakta*, the *Ranjana* function of *Pitta* is to bear the brunt. Thus *Pitta Dosh* takes leading part in the production of *Dhatushaithilya* and *Dhatugaurava*. This leads to *Balakshaya*, *Varnakshaya* and *Ojakshaya*. Ultimately, the *Panduroga* is stated to be afflicted with *Raktalpata*, *Medalpata*, *Nihsarata*, *Vivarnata* and *Shithilendriyata*.

The role of *Dosha- Dushya* in the manifestation of *Panduroga* is described as below:

Role of Vata Dosh

Though *Pitta* is *Pradhana Dosh* in *Panduroga*, *Vata Dosh* also plays an important role in manifestation of *Panduroga*. Out of five types of *Vata*, mainly *Vyana Vayu* is related with the *Samprapti* of *Panduroga*. Vitiated *Vata* is responsible for *Kampa*, *Angasada*, *Gatrashula*, *Raukshya*, *Twak Parushya*, *Kati-Uru-Pada Ruka* etc.

Role of Pitta Dosh

Pitta is responsible for the normal colour of body but when it vitiates due to the same quality in nature it also vitiates *Rakta*, and causes *Panduroga* which ultimately leads to *Panduta* of the body.

Role of Kapha Dosh

Kapha seems to play a vital role in the development of *Panduta*. According to *Acharya Charaka*, *Panduroga* occurs due to vitiation of all three *Doshas*. Aggravation of *Kapha Dosh* causes *Mandagni* which leads to *Uttarottara Dhatu Aposhana* due to *Srotorodha* and ultimately leads to *Panduta* of the body.

It has also been stated that *Santarpana* which broadly means anabolism, brings about an increase in *Kapha* which intern may cause the disease by generating *Ama* and causing *Mandagni*. Thus, any diet which increase *Kapha Dosh* or any disease associated with increase in *Kapha* can cause a change in complexion or *Panduta*. Vitiation of *Kapha Dosh* is responsible for *Gaurava*, *Nidraluta*, *Mandagni*, *Alasya*, *Alpavaka* etc.

Dushyas of Panduroga

Acharya Charaka and *Vagbhata* have mentioned *Twak*, *Rakta* and *Mamsa* as the dominant *Dushyas* in *Panduroga*. *Dhatu* involved in the pathogenesis of *Panduroga* can also be understood by a detailed study of symptoms.

The symptoms such as *Aruchi*, *Jwara*, *Panduta*, *Gaurava* and *Tandra* are indicative of *Rasa Dhatu Dushti*. *Angamarda* indicates the involvement of both *Rasa* and *Rakta Dhatu*. *Karshya* is indicative of *Mamsa Dhatu Dushti*. *Atisveda* and *Svedabhava* are suggestive of involvement of *Twak*, *Mamsa Dhatu* and *Medo Dhatu*. *Shirnalomata* is an important indicative of *Asthidhatu Dushti*. The loss of luster and debility are suggestive of depletion of *Oja*. Thus among *Saptadhatus* mainly *Rasa* and *Rakta Dhatu* are involved in this disease.

- 1. Rasa Dhatu:** According to *Acharya Charaka*, *Sushruta* and *Vagbhata*, *Rasa Dhatu* undergoes a change to produce *Pandubhava*.^[12] *Acharya Charaka* and *Acharya Sushruta* have mentioned *Panduta* as one of the disease associated with the vitiation of *Rasa* ^[13]. *Acharya Charaka* has already stated that vitiated *Doshas* get lodged in *Rasadi Dhatus* and produce the disease^[14] whereas *Acharya Sushruta* has mentioned that when the vitiated *Vata* as well as *Amadosha* affect the *Rasa Dhatu*, the disease is produced.
- 2. Rakta Dhatu:** *Acharya Charaka* and *Acharya Sushruta* have clearly mentioned that the vitiation of all the three *Doshas* leads to *Rakta Dushti* and thereby *Twak* becomes pale in colour. According to *Acharya Harita*, there is a decrease in the blood volume, as is clearly indicated by "*Nayati Rudhirashoshana*"^[15]. *Acharya Charaka* has mentioned the word *Alparakta* for this condition.

Complication (Upadrava)

Any factor which in early part causes development of diseases, if the same factor in late part produces any other severe manifestation, then it is called

Upadrava. *Acharya Sushruta* only has described the *Updravas of Pandu*.

Treatment of *Panduroga*

In Ayurveda, three general principles of treatment have been mentioned in *Charaka Samhita*.^[16] They are *Daivavyapashraya*, *Yuktivyapashraya* and *Satvawajya*. Here only *Yuktivyapashraya Chikitsa* has been mentioned which is as follows.

1. *Nidana Parivarjana* (Avoidance of aetiological factors)
2. *Snehana* (Oleation therapy) and *Swedana* (Fomentation therapy)
3. *Shodhana* (Eliminating the factors responsible for producing the disease).
4. *Shamana* (Palliative treatment) to correct the deficiency or abnormality and also treat the allied symptoms.

In *Pandu Roga* both *Shodhana* and *Shamana Chikitsa* can be performed. Keeping the above view in mind various method have been prescribed, some of which act as *Snehana*, some as *Shodhana* and some act specifically on *Panduroga* along with *Snehana* and *Shodhana Gunas* importance.

Snehana- In case of *Pandu*, there is diminution of *Rakta*, *Meda*, *Oja* etc. and the body becomes dehydrated, emaciated and deficient in lipid substances; which provoke *Vata* causing further deterioration the condition. 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. They can be used in various types of *Pandu* according to the predominance of *Doshas*, variation in pathogenesis and in symptoms.

Swedana: After *Snehana*, *Swedana Karma* is done depending upon the patient's condition so as to bring the *Doshas* into *Koshtha*.

Shodhana: *Vamana* and *Virechana Karma* both can be performed in *Panduroga* after proper oleation. Commenting on the performance of *Vamana*, *Acharya Dalhana* has said that while performing *Vamana* in case of *Panduroga* one should always keep in mind about physical condition of the patients, the climate, time and place. *Acharya Charaka* has mentioned *Madanaphala* as most suitable drug for emesis in case of *Pandu*.^[17] Similarly, for *Virechana* a long list of drugs has been mentioned in *Ayurvedic* texts but *Acharya Sushruta*^[18] has given more stress on *Haritaki* in all types of *Pandu*.

Shamana Chikitsa (Palliative treatment)

1. Treatment according to predominance of *Doshas*.
2. Specific treatment.
3. Treatment according to the predominance of *Lakshanas* (symptomatic treatment).
4. *Pathya-Apathya*

I. Treatment according to predominance of *Doshas*

In cases of *Vatika Pandu* the substances having *Snigdha Guna*, in *Paittika* the substances having *Madhura*

and *Tikta Rasa* and in *Kaphaja Pandu* drugs having *Ushna Virya* and in *Tridoshja Pandu*, a mixture of all the above should be prescribed. In *Mridbhakshanajanya Pandu*, the *Mritika* which may be composed of various indigestible and inaccessible substances obstructs various canals. Thus, it is necessary to remove it by *Tikshna Virechana*.

II. Specific treatment: *Vishista Aushadhi* (Specific Drugs) - As already described that *Pandu* is predominantly due to lack of blood. The fact that *Lauha* is closely related with formation of blood was well realized and that is why *Rakta* has also been known by the word *Lohita*, and *Pandu* by the word *Vilohita*. Use of *Lauha* preparation in the treatment of *Pandu* is mentioned by almost all the *Ayurveda Samhita*. In this connection, a verse from *Acharya Vagbhata* ^[19] is important -*Pandvamaye Shreshtha*.

Various forms of drugs which have been used in the treatment of *Pandu* in *Ayurvedic* texts: In the treatment of *Pandu*, single drug or a combination of two or more drugs have been used. A description is given as:

1. Single drugs which have been used in *Pandu* are - *Lauha Bhasma*, *Mandura Bhasma*, *Pure Kaseesa*, *Shilajita*, *Vardhamana Pippali* etc.
2. Compound drugs which are of vegetable origin e.g. *Triphala*, *Phalatrikadi Kwatha*, *Punarnavashtaka Kwatha*, *Vidangavaleha* etc.
3. Drug which are a combination of vegetable origin and animal origin e.g. *Mahatiktaka Ghrita*, *Pathya Ghrita*, *Rajani Ghrita*, *Gomutraharitaki* etc.
4. Drugs which are a combination of vegetable and mineral origin e.g. *Yogaraja*, *Shilajatvadi Vati*, *Navayasa Lauha*, *Mandura Vataka*, *Punrnnavadi Mundura*.
5. *Asava* and *Arishta* e.g. *Lauhasava*, *Punarnavasava* etc. In brief the *Panduhara Yogas* are described in various forms such as *Churna*, *Vati*, *Asava*, *Arishta*, *Avaleha*, *Ghrita*.

III. *Pathya- Apathya*

This includes diet and environmental factors which should be regulated according to the need of the body.

(A) *Pathya* - (Measures which are beneficial to the patients of *Pandu*)

Acharya Sushruta has mentioned the use of drink containing juice of *Amalaki*, *Ikshurasa*, salt and honey ^[20]. Similarly, vegetables and fruits which are beneficial in *Pandu* have also been mentioned in *Bhaishajya Ratnavali*. They are *Patola*, *Guduchi*, Leaves of *Chaulai* and *Punarnava*. *Pakva Amalaka*, *Kharjura*, *Rasona*, *Palandu* etc. are beneficial in *Panduroga*.

(B) *Apathya* - (Measures that aggravate the disease)

All those measures should be avoided which aggravate the disease. The various measures which are responsible for the development of *Panduroga* have been described previously.

DISCUSSION

Causative factors of *Pandu* are widely described in *Samhitas*. According to *Acharya Sushruta* ^[21] *Rakta* gets vitiated by *Diwasvapa*, *Viruddha Bhojana* and *Krodha*. He

has also mentioned that *Krodha, Shoka, Bhaya, Vidagdha Anna Sevana, Ati Maithuna* and *Tila Tail* and *Pinyaka* leads to vitiation of *Pitta Dosha*^[22]. *Ativyayama, Ratrijagarana, Nidranasha, Ativyavaya* and *Ati Adhvagamana* leads to *Vata Prakopa*^[23]. *Acharya Charaka* has mentioned *Pandu Roga*^[24] caused by suppression of *Chhardi, Vegavarodha, Viruddha Anna Sevana* and of excessive use of *Ati Amla* and *Lavana Rasa*^[25]. Here a question may arise that how the psychological factors can affect *Dhatuposhana* which ultimately results in *Pandu*? In this context one should remember that *Acharya Charaka*^[26] has emphasised bad effect of *Chinta, Bhaya*, etc. on digestion. All these causes improper digestion of food which leads to improper *Rasa Dhatu* formation and further hamper *Rakta Dhatu, Mamsa Dhatu* formation and so on and thus leads to *Pandu Roga*. *Nidanarthakara Roga* also play important role as cause of *Panduroga* according to various classical texts. Diseases like *Raktakshaya, Raktatipravartana, Raktarbuda, Raktarsha, Raktapradara, Yakritaplihedha* etc. condition are directly or indirectly related with *Rakta Dhatu Kshaya* which further results in all *Dhatu Kshaya*. While *Punaravartaka Jwara Grahani, Jeernajwara, Shotha, Udararoga, Rajyakshma* etc. involving vitiation of *Agni and Ama* production, which in next step obstructs the *Dhatuvaha Srotas* which leads to disturbance in *Dhatuposhan Krama* and ultimately produces *Pandu*. Also *Acharya Charaka* has mentioned *Pandu* as a *Santarpanoththa Vikara*^[27], for which *Samprapti* may be same as described above. Only difference is, in this case obstructing factor may be *Kapha* as it is related with *Santarpana*.

The features described as *Purvarupa* of the disease are some of the general feature itself as *Hridspandana* (palpitation), *Shrama* (fatigue), *Angasada* and *Gatrasada* (weakness). Some *Purvarupas* are related to features of digestive system or *Agni* as *Avipaka, Aruchi, Alpavahnita, Vidamutrapitata* etc., indicating that *Agni* is getting disturbed here and production of *Mala Swarupa Pitta* is increasing here resulting in the increased yellow coloration of urine and stool. *Raukshya* and *Twaksphutita* are the features of *Raktakshaya* which are developing here. There is vitiation of *Agni* resulting in features of *Mandagni* and decreased production of *Rakta Dhatu* with increased production of *Mala-Pitta*. *Sthivanadhikya* is a feature described in the manifestation of *Ama*.

Mridabhakshana is also the aetiology of the disease and viewing it is an individual could well forecast the future development of worm and anaemia is an individual. This is also a symptom found present in iron deficiency anaemia as pica or unusual cravings for eatables. *Sweda-abhava* is feature which interpreted by commentators as *Vyadhiprabhava*, meaning the effect of disease itself. In *Rupavastha*, there is also the simultaneous involvement of other *Dhatu*s of the body resulting in their decline in quality as well as quantity wise. It is appealing to note that though the disease is *Pitta* predominance, the features developing also here includes *Shishira Dwesha* which is neither a features of *Raktakshaya* or *Pitta Vriddhi*.

Acharya Sushruta has classified *Panduroga* in 4 varieties but *Acharya Charaka* has mentioned one additional variety of *Panduroga* that is *Mrida Bhakshanjanya Pandu*.

Acharya Sushruta has mentioned that *Pandu Bhava* is caused by vitiation of *Twaka* through the vitiated *Rakta* in one who indulgence in *Ahita Ahara Vihara*.^[28] *Acharya Vagbhatta* has mentioned the *Samprapati* given by *Acharya Charaka*. Thus the pathology of *Panduroga* is mainly concerned with vitiation of *Pitta* which in turn vitiates the *Rakta*, leading to condition of *Pandubhava*. So, *Pitta* being main factor in the causation of *Panduroga*, all the fivefold functions of it are affected more or less, but as the main seat of the disorganization is the *Rakta* and complexion of body, the *Ranjana* and *Bhrajana* function of *Pitta* is to bear the brunt. Thus *Pitta Dosha* takes leading part in the production of *Dhatushaithilya* and *Dhatugaurava*. This leads to *Balakshaya, Varnakshaya* and *Ojakshaya*. Ultimately, the *Panduroga* is stated to be afflicted with *Raktalpata, Medalpata, Nihsarata, Vivarnata* and *Shithilendriyata*. It has also been stated that *Santarpana* which broadly means anabolism, brings about an increase in *Kapha* and *Ama* production which leads to *Mandagni* and change in complexion of body i.e., *Panduta*. Vitiation of *Kapha Dosha* is responsible for *Gaurava, Nidraluta, Mandagni, Alasya, Alpavaka*. The symptoms such as *Aruchi, Jwara, Panduta, Gaurava* and *Tandra* are indicative of *Rasa Dhatu Dushti*. *Angamarda* indicates the involvement of both *Rasa* and *Rakta Dhatu*. *Karshya* is indicative of *Mamsa Dhatu Dushti*. *Atisveda* and *Svedabhava* are suggestive of involvement of *Twaka, Mamsa Dhatu* and *Medo Dhatu*. *Shirnalomata* is an important indicative of *Asthidhatu Dushti*. The loss of lustre and debility are suggestive of depletion of *Oja*.

Clinical presentation of *Pandu* can be correlated with anaemia of modern medical science. Anaemia is without blood/ pallor of the body. It is the most under diagnosed condition. If left untreated, it leads to many serious complications like CVD, compromised immune disease.^[29]

Nidanaparivarjana is the best treatment for any disease. This principle also can be applied in the *Pandu* which will be the first step in the treatment of disease. Further as per condition of *Doshas*, treatment should be applied.^[30] As mentioned in the early pages of disease part, *Pandu* is a *Pitta* predominant *Tridoshaja Vyadhi*. Chief pathogenesis taking place during *Samprapti* is *Srotorodha* which generates disturbance in *Dhatuposhana* and lastly *Dhatukshaya*. To correct obstruction of *Srotas, Shodhana* is indicated in *Samhitas*. It should be *Tikshna* and *Snigdha*.^[31] For ignition of *Jatharagni* as well as *Dhatvagnis, Ghrita* is believed as one of the best remedy and this is why various kind of *Ghritas* have been described in the treatment of *Pandu*. *Ghrita* is *Jivaniya* and *Rasayana* too which helps in *Dhatukshaya*. As the disease is closely related with decrease of *Rakta*, many *Lauha* preparations also are described in the management of *Pandu*. All these treatment modalities correct metabolism and stimulates *Dhatuposhana*.

REFERENCES

1. Garude 124 adhyaya/24 shloka
2. Agnivesha, Charaka, Dridhabala, Charaka Samhita, Sutrasthana 28/10, ed. Vd. Yadavaji Trikamaji Acharya, Reprint Edition, Varanasi, Chaukhamba Surabharati Prakashan,2014;179
3. Sushruta, Sushruta Samhita, Sutra Sthana 14/30, edited by Vaidya Jadavji Trikamaji Acharya, Varanasi, Chaukhamba Surbharati Prakashan,2014;65
4. Ibidem(2) Sushruta Samhita, Sutra Sthana 24/9;116
5. Vagbhata, Ashtanga Hridaya, Sutra Sthana 11/4 edited by Pt. Hari Sadashiva Shastri Paradakara Bhashagacharya, reprint edition, Varanashi, Chaukhamba Surbharati Prakashan,2014;183
6. Amarasinhma. Amaroakosha Ed. By Ramashrami, New Delhi, Rashtriya Samskrita Samsthan,2003;268
7. Vachaspatym by Taranath Tarkavachaspati Bhattacharya, Vol- V, Varanasi, Chowkhambha Sanskrit series office, 1962;4294.
8. Monier William. M, A Sanskrit English Dictionary, 2007 edition, New Delhi, Bharatiya Granth Niketan, 616.Dwiteeya Khanda 6/51.
9. Harita Samhita Edited by Ramavalamba Shastri (1985). Prachya Prakashan Varanasi, 3rd 8/6.
- 10.Ibidem (5) Charaka Samhita, Chikitsasthana16/13-16;533
- 11.Ibidem (6) Sushruta Samhita, Uttara Tantra 44/7; 729
- 12.Ibidem (5) Charaka Samhita, Sutra Sthana 18/10;107, Ibidem (6) Sushruta Samhita, Sutra Sthana 24/6;119 Ibidem (7) Ashtanga Hridaya, Nidana Sthana 13/3;517
- 13.Ibidem (33) Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya.
- 14.Ibidem(5) Charaka Samhita, Sutra Sthana28/8;179
- 15.Acharya Harita, Harita Samhita,Tritiya Sthana, Dhatukshaya Lakshana, 9/9 First ed.Shri Krushnadas. Mumbai: Shri venkatesh Mudranalaya; 1984;267
- 16.Ibidem(5) Charaka Samhita, Sutra Sthana11/63;78
- 17.Ibidem(5) Charaka Samhita, Siddhi Sthana 11/3-6; 727
- 18.Ibidem(6) Sushruta Samhita, Uttara Tantra 44/14; 730
- 19.Ibidem(7) Ashtanga Hridaya, Uttara Sthana 40/48; 943
- 20.Ibidem(6) Sushruta Samhita, Uttara Tantra 44/36; 733
- 21.Ibidem (2) Sushruta Samhita, Sutra Sthana 21/25; 104
- 22.Ibidem (2) Sushruta Samhita, Sutra Sthana 21/21; 103
- 23.Ibidem (2) Sushruta Samhita, Sutra Sthana 21/19; 103
- 24.Ibidem (1) Charaka Samhita, Chikitsasthana16/7,8; 527
- 25.Ibidem (1) Charaka Samhita, Sutrasthana26/43 (2,4); 144
- 26.Ibidem (1) Charaka Samhita, Vimanasthana 2/9; 238
- 27.Ibidem (1) Charaka Samhita, Sutrasthana 23/5;122
- 28.Ibidem (2) Sushruta Samhita, Uttar Tantra 44/7; 729
- 29.https://www.google.co.in/search?q=prevalence+of+Anaemia+in+india&client=firefox
- 30.Ibidem (1) Charaka Samhita, Chikitsasthana16/ 42; 528
- 31.Ibidem (1) Charaka Samhita, Chikitsasthana16/ 39; 528.

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