



ROLE OF RASAUSHADHI IN PANDU ROGA- A REVIEW

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Article Received on 01/05/2023

Article Revised on 22/05/2023

Article Accepted on 12/06/2023

ABSTRACT

Pandu roga, also known as anemia, is a prevalent health condition characterized by decreased number of red blood cells or low hemoglobin levels in the body. It can result in symptoms such as fatigue, weakness, shortness of breath, and pale skin.^[1] *Rasa Ausadhi*, a branch of Ayurvedic medicine, offers a holistic approach to the treatment of *Pandu roga*. It involves the use of specific *Rasoushadhi* to address the underlying imbalances and restore optimal health. *Rasoushadhi* is considered the preferred treatment method for *Pandu roga* due to its unique properties. It exhibits fast effect by quickly spreading throughout the body tissues and targeting the root causes of the condition. Even in small doses, *Rasoushadhi* can have a profound impact on improving the symptoms of anemia. *Rasoushadhi* also possesses *deepana* and *pachana* effects and many of these used for *pandu roga* contains direct supplement of iron in the form of *Loha*. By which it enhances digestion and absorption of iron and other nutrients, which is essential for the production of red blood cells and hemoglobin. The use of *Rasa Ausadhi* in managing *Pandu roga* aims to not only address the symptoms of anemia but also restore the overall balance and vitality of the body. It takes into the individual's unique constitution and aims to provide a comprehensive and personalized treatment approach.

KEYWORDS: *Pandu roga*, *Rasa ausadhi*.

INTRODUCTION

Rasashastra is an ancient alchemical science that involves the selection and collection of genuine raw drugs, different processing techniques or *samskaras*, and the preparation of herbomineral and mineral drugs for treating illnesses. According to *Rasapaddati*, *Rasachikitsa* falls under *Daiwi chikitsa*, which utilizes *Rasa* and *Rasoushadhas* (herbal-mineral formulations) for treatment.^[2] *Rasoushadhas* are highly effective even at low doses and provide immediate effect. They are also palatable, making them more easily consumed. Even an acute poison can become an excellent drug if it is properly administered. On the other hand, even a drug, if not properly administered becomes a poison showing high toxic effects.^[3]

The processing of *Rasa dravya* with organic drugs, particularly through the *Bhavana* technique in *Kharaliya Rasakalpa*, enhances the stability of the formulation. This process, known as *Samskara*, involves classical pharmaceutical processing that transforms the inherent attributes of a substance, adding new properties or improving its quality.

Pandu Roga, a condition extensively described in Ayurvedic texts, dates back to the *Vedic period*. References to this disease can be found in ancient Hindu treatises such as the *Ramayana*, *Mahabharata*, and *Agnipurana*. The name "*Pandu Roga*" is derived from the predominance of *Pandubhava*, which refers to the pale and yellowish color of the skin, nails, and eyes observed in this condition.^[4] The disease is classified as a *Rasa pradoshaja vikara*, indicating its origin from an imbalance in *Rasa dhatu* and the resulting manifestation of symptoms such as skin discoloration.

Different Ayurvedic texts present varying perspectives on the causative factors of *Pandu Roga*. *Acharya Charaka* associates it with the aggravation of *Pitta* in *Grahani*, while *Acharya Sushruta* correlates it with *Hridaroga* and *Acharya Vagbhata* connects it with *Udar Roga*. Regardless of the specific causative factors, *Pandu Roga* involves the vitiation of *Pitta Pradhana Vatadi* Dosh and the *Raktadhatu* in the body.

Pandu Roga experiences a decrease in *rakta dhatu*, strength, complexion, and the qualities of *Sneha*, *Meda*,

and *Oja*. The patient becomes *Nihara* and *Shithilendriya*. The condition can arise due to both *santarpanaya janya* and *apatarpanya janya* causes.^[5]

Ayurvedic texts mention five types of *Pandu Roga*: *Vataja Pandu*, *Pittaja Pandu*, *Kaphaja Pandu*, *Sannipataja Pandu*, and *Mridbhakshanaja Pandu*. However, *Acharya Sushruta* does not include *Mridbhakshanaja Pandu* as a separate type and instead describes it as a set of symptoms.

The concept of *Rasa ranjaka pitta* in Ayurvedic texts explains that when *Rasa dhatu* comes in contact with *ranjaka pitta*, it transforms into *rakta*. This suggests that the redness of blood is attributed to *ranjaka pitta*. Modern physiology correlates this to the presence of hemoglobin in red blood cells, which gives blood its red color. Hemoglobin is compared to *Rasa ranjaka pitta*.^[6]

Anemia can also be caused due to malnutrition, including deficiencies of iron, folic acid, protein, and vitamin-B.

RASAUSHADHIS MENTIONED IN DIFFERENT CLASSICS FOR PANDU

Table no. 01: Showing *Rasaushadhis* mentioned in different classics for *pandu*.

CHARAKA	ASHTANGA HRIDAYA	ASHTANGA SANGRAHA
1.Lauha bhashma 2.Navayasa churna 3.Mandura bhashmayoga 4.Mandura vataka 5.Swarnamakshika yoga 6.Yogaraja 7.Shilajatu Vataka 8.Punarnava mandura 9.Lohadi rasayana 10. Darvyadi leha	1.Mandura Vataka	1.Trikatukadhi vataka 2.navayasa choorna 3.mandura vataka 4.yoga raja gutika 5.vajrabhida \ 6.gandirarishta 7.vyoshadhi gritha

Table No.02: Showing *Rasaushadhis* mentioned in different classics for *pandu*.

Rasendr A Sara Sangrah A	Ayurved A Sara Sanghra	Rasaratn A Sanuchay A	Rasendra Chudama Ni	Rasa Chandan Shu	Rasa Manjari	Gada Nigraha	Rasa Ratna Sanchaya	Harita Samhita
1.Darvyadi Lauha 2. Vidangad i Lauha 3.Chandras uryatmaka rasa 4.Nisha lauha 5.Pranavall abharas 6.Panchana n vati 7.Pandu sudana rasa	1.Madhum alini vasanta 2.Tapyadi lauha	1.Hamsa mandura 2.Jayapala rasa 3.Tralokya sundara rasa 4.Arogyas agara rasa 5.Kalavid hwamsana rasa 6.Panchan a rasa 7.Arogyas ara rasa	1.Silajatu rasayana	1.Pandu panchanan rasa 2.Panchamr uta lauha	1.Ananda udaya rasa	1.Pandu roga mandura 2.Lauhadho modaka 3.Manduradh avalehya 4.Lavana maduras	1.Trieloukya sundara rasa 2.Jayapala rasa 3.Tankanadi yoga 4.Kamalapran uta 5.Sindhura bhusana rasa 6.Kamsadi panchaka 7.Mustadi churna 8.Sagara rasa 9.Pandhu ghana panka soshana rasa 10.Pittapanduvar i gutika	1.Lauha churna vati 2.Sunthayadi lauha churna 3.Vajra mandu vataka

Probable mode of action

Rasa Ausadhi formulations demonstrate strong hematinic properties, effectively stimulating the production of red blood cells and increasing hemoglobin levels. These medications address the underlying causes of anemia and promote overall blood health.

The inclusion of iron in many *Rasa Ausadhi* preparations provides essential supplementation, replenishing iron stores, combating iron deficiency anemia, and improving the capacity to carry oxygen.

Ayurvedic herbs with beneficial effects on blood health, such as *Punarnava* (*Boerhavia diffusa*), *Amalaki* (*Emblca officinalis*), and *Guduchi* (*Tinospora cordifolia*), are often incorporated into *Rasa Ausadhi* formulations. These herbs possess antioxidant, immunomodulating, and blood-purifying properties.^[6]

Rasa Ausadhi also encompasses *Rasayana* therapies, which aim to rejuvenate and revitalize the body. These therapies strengthen overall vitality, including blood health, and typically involve a combination of herbs, minerals, and metals known for their revitalizing effects.

Practitioners of Ayurveda tailor *Rasa Ausadhi* treatments to individual factors such as *Prakriti* (constitution), the severity of the condition, and the underlying causes of anemia. This personalized approach ensures targeted and effective management of *Pandu roga*.

Here are some additional details about some specific *Rasa Ausadhi* formulations, *Punarnava mandura*, *Mandura Vataka*, *Dasryyadi loha*, *Ayashkriti* commonly used in the management of *Pandu roga*.

Punarnava Mandura

Mandura Bhasma (an incinerate form of iron Fe₂O₃), This ingredient acts as the activator of the formulation and plays a crucial role in the pharmacodynamics of *Punarnava Mandura*. One of its significant advantages lies in its ability to balance and pacify intensified *Pitta*, thereby promoting digestive and metabolic functions. According to *Acharya Charaka*, *Mandura* and its preparations are essential in treating cases of *Pandu*, a condition characterized by anemia. This is primarily due to the ferric ferrous fraction of *Mandura*, which provides an adequate amount of iron necessary for normal erythropoiesis, or the production of red blood cells. It contains *Gomutra* (Cow's urine) as one of its ingredients, which is known for its immune-enhancing properties. Cow urine contains erythropoietin hormone, which may contribute to its effectiveness in treating anemia. Furthermore, the iron present in Cow's urine helps maintain balance and supports the production of red blood cells and hemoglobin.^[8,9]

Mandura Vataka

Mandura Vataka primarily contains iron-based compounds and herbal ingredients, making it a valuable supplement for iron deficiency anemia. *Loha Bhasma* (iron ash): It serves as the primary ingredient in *Mandura Vataka*, providing a high concentration of bioavailable iron to support red blood cell production. *Gandhaka* (sulfur) acts as a detoxifying agent, helping eliminate toxins and promoting blood purification. *Haritaki* (*Terminalia chebula*) possesses astringent and rejuvenating properties, aiding in digestion, and improving overall gut health. *Vibhitaki* (*Terminalia bellirica*) supports the body's natural detoxification processes and promotes healthy digestion. *Amalaki* (*Emblica officinalis*) is rich in vitamin C and acts as a potent antioxidant, enhancing iron absorption and boosting immunity. *Mandura Vataka* acts as a comprehensive hematinic, providing essential iron and other nutrients to combat anemia. It helps improve hemoglobin levels, replenish iron stores, and boost overall vitality.^[10,11]

Darvyadi lauha

Darvyadi Lauha involves its individual ingredients working synergistically to provide therapeutic effects. *Daruharidra* (*Berberis aristata*) is known for its antipyretic, anti-inflammatory, and blood purifying properties. It helps in improving digestion, enhancing

liver function, and boosting the immune system. *Lauha Bhasma* is a processed form of iron that is highly beneficial in the management of anemia. It provides a bioavailable source of iron, which is essential for the production of hemoglobin and red blood cells. Iron supplementation helps in correcting iron deficiency anemia. *Amalaki* (*Emblica officinalis*) also known as Indian Gooseberry, is a rich source of vitamin C and antioxidants. It helps in boosting immunity, enhancing iron absorption, and improving hemoglobin levels. *Haritaki* (*Terminalia chebula*) is known for its digestive properties and helps in improving digestion and assimilation of nutrients. It also possesses antioxidant and rejuvenating effects. *Vibhitaki* (*Terminalia bellirica*) has astringent and digestive properties. It supports digestive health, helps in detoxification, and aids in the elimination of waste products from the body. *Pippali* acts as a digestive stimulant and enhances the absorption of nutrients. It also has immunomodulatory properties and supports respiratory health. *Shunthi* (*Zingiber officinale*) or ginger, aids in digestion, reduces inflammation, and strengthens the immune system. *Pandu* is a *Ruksha Guna Bhuyishtha Vyadhi*, *Shunthi* and *Pippali* (*Snigdha Guna Yukta*) present in *Darvyadi Lauha* may have a significant action on the disease *Maricha* (*Piper nigrum*) or black pepper, stimulates digestion, improves nutrient absorption, and enhances metabolism. *Vidanga* (*Embelia ribes*) possesses anthelmintic properties and helps in eliminating intestinal parasites. It also supports digestive health.

The *Deepana*, *Pachana* property of *Darvyadi Lauha* corrects *Agnimandya* and alleviates *Ama*. Thus, it can break the *Dosha-Dushya Sammurchhna* of the disease. *Daruharidra* is *Pittahara* and *Arochakaghna* due to its *Tikta Rasa*. *Dravyas* like *Amalaki*, *Haritaki* and *Bibhitaka* have properties like *Tridoshashamaka*, *Dhatuwardhaka* and *Rasayana* which may improve *Dhatushaithilya*, *Daurbalya* and *Ojogunakshaya*. *Pippali* and *Vidanga* are *Krimighna*, thus they may be useful in *Mridhakshanajanya Pandu*.^[12,13]

Ayaskriti

Ayaskriti is a traditional Ayurvedic formulation used to address anemia, which is characterized by a decrease in the number of red blood cells or a decrease in hemoglobin levels. It typically contains key ingredients such as iron and various medicinal herbs. *Ayaskriti* often includes iron in a bioavailable form. Iron is an essential mineral required to produce hemoglobin. In cases of anemia, iron deficiency is a common underlying cause. By providing supplemental iron, *Ayaskriti* helps in replenishing iron stores in the body and supports the production of healthy red blood cells. *Ayaskriti* also contain herbs with hematinic properties, which means they promote the production of red blood cells. These herbs may include ingredients such as *Punarnava* (*Boerhavia diffusa*), *Ashwagandha* (*Withania somnifera*), and *Shatavari* (*Asparagus racemosus*). These herbs are believed to stimulate the bone marrow, where

red blood cells are produced, and enhance the process of erythropoiesis (red blood cell formation).^[14]

DISCUSSION

Although *pandu roga* can affect individuals of all age groups, it is more prevalent among young children, primarily due to their consumption of an iron-deficient or low-iron diet. Families with limited income often struggle to afford a proper diet, leading to improper and unbalanced nutrition for their children, making them more susceptible to the disease. According to the World Health Organization, iron deficiency is most observed in low socioeconomic status groups.

The occurrence of *pandu roga* is not influenced by dietary preferences, as it affects both vegetarians and non-vegetarians equally. When *rasa dhatu* interacts with *ranjaka pitta*, it forms *rakta*. In other words, *ranjaka pitta* imparts the red color to *rasa dhatu* and transforms it into *rakta*, indicating that the redness of blood is attributed to *ranjaka pitta*. Modern physiology associates the redness of blood with the presence of hemoglobin in red blood cells (RBCs). Therefore, hemoglobin can be compared to *Rasa ranjaka pitta*. In cases of iron deficiency in the blood, *loha bhasma* is supplemented through food and medicine.

Rasavarga dravya undergoes various purification processes (*Shodhana, Marana, Bhavana, Mardana*, etc.), which alter their characteristics and make them safe and therapeutically effective. Although *Rasaushadhi* have been used for treating different diseases for centuries without notable side effects, concerns have been raised regarding the safety of traditional formulations containing *Rasavarga dravya*. Practical difficulty with *Kastaushadhi* is, their taste and higher dosage requirements which makes them difficult for administration in longer duration. On the other hand, *Rasaushadhis* are administered in smaller doses, which can be easily repeated. Among the various treatment approaches for *pandu roga*, *Rasaushadhis* are considered the most effective due to their quick action, as they rapidly spread into the body tissues even in small doses. Additionally, *Rasaushadhis* exhibit *deepana* (stimulating digestive fire) and *pachana* (aiding digestion) effects which enhances the iron absorption and transformation of *rasa dhatu* into *rakta*.

CONCLUSION

Rasa Ausadhi, including formulations like *Punarnava Mandura* and *Mandura Vataka, Darvyadi loha, Ayashkriti* holds promise in the management of *Pandu roga*. It can be beneficial in the treatment of anemia by addressing the underlying iron deficiency and supporting the production of healthy red blood cells. As we know we should treat *Sadhya* types of disease by using any type of medicine, but in case of *asadhya rogas*, *Rasaushadhi* are only remedy.^[15] These formulations

address the root causes of anemia, improve blood health, and promote overall vitality.

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