

## Conceptual Review Of Raktapitta In Ayurvedic Classics With Modern Correlation To Hemorrhagic Disorders

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### ABSTRACT

**Background:** *Raktapitta* is one of the most significant *Raktapradoshaja Vikaras* described in Ayurvedic literature, characterized by vitiation of *Pitta* and *Rakta Dhatu*. It is classified into two primary types: *Urdhwaga* (upward flow) and *Adhoga* (downward flow), depending on the route of expulsion of vitiated blood. The disease embodies the pathological interaction of *Rakta* and *Pitta*, resulting in hemorrhagic manifestations such as epistaxis, hematemesis, and rectal bleeding. *Acharya Charaka*, *Sushruta*, and *Vagbhata* have extensively discussed its *Nidana*, *Samprapti*, and *Chikitsa*.

**Aim and Objectives:** To review the concept of *Raktapitta* in Ayurvedic classics. To explore its pathological basis and classifications. To correlate *Raktapitta* with hemorrhagic disorders in modern medicine.

**Materials and Methods:** A critical review of *Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya*, and other *Nighantus* was conducted to extract references on *Raktapitta*. Modern texts of pathology and hematology were reviewed to find relevant correlations with hemorrhagic disorders. A comparative and interpretative analysis was done to bridge the classical and modern perspectives.

**Results:** The classical description of *Raktapitta* mirrors the modern understanding of systemic bleeding disorders such as gastrointestinal hemorrhage, epistaxis, hemoptysis, and intracranial bleeding. The role of aggravated *Pitta* in increasing *Rakta Dravata* (fluidity) is analogous to mechanisms seen in platelet disorders, coagulopathies, or capillary fragility. Management in Ayurveda includes *Shodhana* and *Shamana* therapies using herbs with *Rakta-stambhaka*, *Pitta-shamaka*, and *Raktaprasadana* actions.

**Discussion:** *Raktapitta* can be seen as a group of disorders rather than a single entity, encompassing various modern hemorrhagic conditions. The Ayurvedic *Samprapti* provides a unique approach focusing on systemic balance, dietary regulation, and strengthening of vascular integrity. Modern conditions like idiopathic thrombocytopenic purpura (ITP), hemophilia, or vitamin K deficiency-related bleeding show partial symptom overlap. However, *Raktapitta's* holistic treatment approach includes *Shodhana*, *Shamana*, and *Rasayana* therapies, which could have potential integrative value.

**Conclusion:** *Raktapitta* serves as a comprehensive Ayurvedic construct to understand and manage hemorrhagic disorders. Its detailed *Samprapti*, diagnostic parameters, and therapeutic measures reflect a holistic clinical understanding that can be integrated with modern hematological insights for better patient outcomes.

**Keywords:** *Raktapitta*, Hemorrhagic Disorders, Ayurveda, *Pitta Dushti*, *Rakta Dushti*, Bleeding Pathologies

### Introduction

Ayurveda, the ancient science of life, is based on the foundational principles of *Tridosha*, *Sapta Dhatu*, and *Trimala*, which maintain the structural and functional integrity of the human body. Among these, the *Rakta Dhatu* holds immense physiological importance, being responsible not only for nourishment but also for vitality (*Jeevana*). Any vitiation in the *Rakta Dhatu* leads to serious systemic manifestations. One of the most critical conditions resulting from the derangement of *Rakta* and *Pitta* is *Raktapitta*, a disease elaborately described in Ayurvedic classics.<sup>1</sup>

*Raktapitta* is primarily understood as a disorder arising due to *Pitta* aggravation that contaminates and vitiates *Rakta*, leading to spontaneous bleeding through various body channels. It is classified into *Urdhwaga* (upward ejection through mouth, nose, ears) and *Adhoga* (downward flow through rectum, urethra, etc.), with a third type *Tiryakgami* being a mixed or systemic presentation. This classification is unique to Ayurveda, representing the route of bleeding rather than its anatomical origin. The disorder is considered as *Mahagada* (a grave disease) and *Asadhya* (difficult to cure) if not managed in its early stage.<sup>2</sup>

The pathogenesis (*Samprapti*) of *Raktapitta* is deeply rooted in the overconsumption of *Amla*, *Lavana*, *Katu Rasa*, and *Ushna* properties, which vitiate *Pitta*. The aggravated *Pitta*, being *Drava* and *Tikshna* in nature, liquefies the *Rakta Dhatu* and causes it to overflow, leading to spontaneous hemorrhage. The weakened *Rakta* loses its containment and exudes through the body's channels (*Srotas*), showing manifestations that are often sudden and life-threatening.<sup>3</sup>

Ayurvedic texts such as *Charaka Samhita* and *Sushruta Samhita* offer comprehensive insights into the *Hetu* (causes), *Purvarupa* (prodromal symptoms), *Rupa* (clinical features), *Samprapti* (pathogenesis), *Upadrava* (complications), and *Chikitsa* (treatment) of *Raktapitta*. *Acharya Sushruta* also correlates the condition with *Dhamani Puranam*, or the overflow of blood through arteries and veins, giving an early anatomical perspective. This multi-faceted description sets a base for a comparative understanding with modern pathologies involving bleeding diatheses.<sup>4</sup>

In modern medicine, hemorrhagic disorders such as thrombocytopenia, hemophilia, disseminated intravascular coagulation (DIC), and vitamin K deficiency present with symptoms that closely resemble those described under *Raktapitta*. These disorders often involve dysfunction in platelet number or function, coagulation cascade defects, or vascular integrity issues. Bleeding from orifices like nose, mouth, gastrointestinal tract, or genitourinary tract, and intracranial hemorrhages are not uncommon. Thus, a conceptual link between *Raktapitta* and hemorrhagic disorders becomes evident.<sup>5</sup>

The present review aims to critically evaluate the classical Ayurvedic understanding of *Raktapitta* and its modern hematological correlates. By analyzing classical references and juxtaposing them with contemporary clinical findings, this study attempts to build a bridge between the two systems of medicine. Furthermore, it emphasizes the preventive and therapeutic potential of Ayurvedic interventions in managing bleeding disorders, which may contribute to integrative and holistic health care models.<sup>6</sup>

## AIM AND OBJECTIVES

### Aim:

To critically review the concept of *Raktapitta* in Ayurvedic texts and correlate it with hemorrhagic disorders described in modern medical science.

### Objectives:

1. To explore classical Ayurvedic references related to *Raktapitta*.
2. To analyze the *Samprapti*, classification, and clinical features of *Raktapitta*.
3. To identify similarities between *Raktapitta* and modern hemorrhagic disorders.
4. To highlight Ayurvedic diagnostic and therapeutic principles in managing bleeding disorders.
5. To propose integrative understanding for better clinical applicability.

## MATERIALS AND METHODS:

A thorough literary review was conducted using classical Ayurvedic texts such as *Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya*, and various *Nighantus* to collect references related to *Raktapitta*. Relevant modern medical literature, including standard textbooks of pathology and hematology, was reviewed to understand hemorrhagic disorders. Comparative analysis was performed to correlate Ayurvedic concepts with modern pathophysiology, diagnosis, and management principles.

## CONCEPTUAL STUDY ON RAKTAPITTA

The term *Raktapitta* is a compound of *Rakta* (blood) and *Pitta* (one of the three *Doshas*), indicating a pathological state where aggravated *Pitta* vitiates *Rakta Dhatu*, resulting in spontaneous bleeding. *Acharya Charaka* defines *Raktapitta* as a condition caused by the *Raktadushti* due to *Pitta* aggravation, leading to its exudation through *Urdhwa* (upper), *Adho* (lower), or *Tiryak* (lateral/systemic) routes.<sup>7</sup>

### Nidana (Etiology):

The causative factors (*Nidana*) of *Raktapitta* primarily involve indulgence in:

- *Amla* (sour), *Lavana* (salty), and *Katu* (pungent) *Rasa*
  - *Ushna*, *Tikshna*, and *Vidahi Ahara* (hot, sharp, and irritant food)
  - *Atapa* (excessive sun exposure), *Krodha* (anger), *Alpashleepa* (insufficient sleep)
- These factors vitiate *Pitta*, which in turn contaminates *Rakta*, making it *Drava* (fluid) and prone to extravasation.<sup>8</sup>

### Samprapti (Pathogenesis)<sup>9</sup>

- Aggravated *Pitta* due to *Nidana Sevana* contaminates and liquefies *Rakta Dhatu*.
- *Rakta*, having lost its *Sthira Guna* (stability), starts flowing abnormally in the *Srotas*.
- Depending on the route, it manifests as:

- *Urdhwaga Raktapitta*: Bleeding through mouth, nose, ears (epistaxis, hematemesis)
- *Adhoga Raktapitta*: Bleeding through anus, urinary tract, vagina (melena, hematuria, menorrhagia)
- *Tiryakgata Raktapitta*: Systemic bleeding like petechiae, subcutaneous hemorrhage

Nidana (Causative Factors)



Aggravation of Pitta Dosha

(Due to Amla, Lavana, Katu Rasa; Ushna, Tikshna, Vidahi Dravyas)



Pitta enters and vitiates Rakta Dhatu



↑ Dravata (fluidity) and Tikshnata (sharpness) of Rakta



Loss of Rakta's stability (Sthirata) and containment



Overflow of Rakta from Srotas (channels)



Depending on route:

├─ Urdhwaga Raktapitta → Epistaxis, Hematemesis, etc.

├─ Adhoga Raktapitta → Hematuria, Rectal bleeding, etc.

└─ Tiryakgata Raktapitta → Petechiae, Subcutaneous hemorrhage



Raktakshaya, Daurbalya, Murchha, Death (if unmanaged)

### Poorvarupa (Prodromal Symptoms):<sup>10</sup>

Acharya Charaka mentions the following *Poorvarupa*:

- *Bhrama* (giddiness), *Aruchi* (anorexia)
- *Murchha* (fainting), *Ushna Gatrata* (heat sensation)
- *Vibhrama* (confusion)

These symptoms signal the impending hemorrhagic crisis.

### Rupa (Clinical Features):<sup>11</sup>

The clinical features are based on the route of blood expulsion:

- *Urdhwaga*: *Mukha Raktasrava* (bleeding from mouth), *Nasa Raktasrava* (epistaxis)
- *Adhoga*: *Gudamarga Raktasrava* (rectal bleeding), *Mutra Raktata* (hematuria)
- *Tiryakgata*: *Charma Vivarana* (skin rashes), *Raktasrava* from *Tvak*

Each form is accompanied by signs of aggravated *Pitta* – *Daha* (burning), *Pita-Rakta Varna* (yellow-red color), *Ushna* (heat), *Tikshna* (sharpness).

### Bheda (Types):<sup>12</sup>

- **Based on *Gati* (route):**

- *Urdhwaga Raktapitta*
- *Adhoga Raktapitta*
- *Tiryakgata Raktapitta*

- **Based on *Dosha* dominance:**

- *Pitta-pradhana Raktapitta* – severe *Daha*, *Pita Raktasrava*
- *Rakta-pradhana Raktapitta* – profuse, thick blood, minimal systemic signs

### Srotodushti and Marma Involvement:

- *Raktavaha Srotas* are primarily vitiated, leading to rupture or leakage of vascular channels.
- Involvement of *Marma* like *Sira* (vessels) and *Hridaya* (heart) could indicate serious complications.

### Upadrava (Complications):<sup>13</sup>

If not treated early, *Raktapitta* may lead to:

- *Murchha* (syncope), *Daurbalya* (weakness), *Kshaya* (emaciation), *Maranam* (death)

- Modern parallels: hypovolemic shock, anemia, systemic hemorrhagic syndromes

#### **Chikitsa Sutra (Line of Treatment):<sup>14</sup>**

- **First principle:** *Nidana Parivarjana* – avoid causative factors
- **Treatment types:**
- *Shodhana: Vamana* in *Urdhwaga*, *Virechana* in *Adhoga* types
- *Shamana:* Use of *Sheeta*, *Tikta*, *Madhura* drugs like *Draksha*, *Amalaki*, *Mulethi*
- *Rakta-stambhaka* herbs: *Lodhra*, *Nagakeshara*, *Mochrasa*
- *Raktaprasadana* herbs: *Guduchi*, *Sariva*, *Mustaka*
- *Rasayana* therapy to restore *Dhatu Bala*

#### **Diet and Lifestyle Management:<sup>15</sup>**

- Cooling and astringent diet (*Sheeta* and *Kashaya Rasa*)
- Avoidance of *Ushna*, *Tikshna*, and *Amla* foods
- Bed rest and *Manonigraha* (mental calmness) to avoid *Pitta* aggravation

#### **Prognosis (*Sadhya-Asadhyata*):<sup>16</sup>**

- Early and mild forms are *Sadhya* with proper management.
- Severe or chronic cases involving *Marma* or *Oja-Kshaya* are considered *Asadhyata* or *Krichhra Sadhya*.

### **MODERN REVIEW**

Hemorrhagic disorders in modern medicine refer to a broad spectrum of conditions marked by an abnormal or excessive bleeding tendency, which may arise due to defects in blood vessels, platelets, or coagulation factors. These disorders can be congenital—such as hemophilia A and B, and von Willebrand disease—or acquired, like idiopathic thrombocytopenic purpura (ITP), disseminated intravascular coagulation (DIC), and bleeding due to anticoagulant therapy. Depending on the cause and severity, bleeding may present spontaneously or following minimal trauma, affecting both external and internal body systems.<sup>17</sup>

#### **Pathophysiology**

The underlying mechanisms of hemorrhagic disorders vary. Platelet-related disorders involve either a reduction in platelet count (*thrombocytopenia*) or functional defects that impair clot formation. Coagulation disorders result from deficiencies in clotting factors that lead to delayed or absent fibrin clot formation. Vascular disorders, though less common, involve structural weakness or inflammation of blood vessels. Common clinical features include epistaxis, gum bleeding, gastrointestinal bleeding, hematuria, heavy menstruation, bruises, petechiae, and in severe cases, internal bleeding such as hemarthrosis or cerebral hemorrhage.<sup>18</sup>

#### **Diagnostic Approach:<sup>19</sup>**

- CBC (Complete Blood Count): Platelet count
- Bleeding Time and Clotting Time
- Prothrombin Time (PT), Activated Partial Thromboplastin Time (aPTT)
- Platelet Function Assays
- Coagulation Factor Assays
- Bone Marrow Examination (in pancytopenia, leukemia)

#### **Management Strategies:<sup>20</sup>**

The treatment depends on the underlying cause and severity:

#### **General Principles:**

- Hemostasis support (compression, ice packs)
- Blood and component therapy
- Avoidance of trauma and NSAIDs

#### **Specific Treatments:**

| Condition                      | Treatment   |
|--------------------------------|---|
| Hemophilia A/B                 | Factor VIII/IX replacement                        |
| von Willebrand disease         | Desmopressin (DDAVP), vWF concentrates            |
| ITP                            | Corticosteroids, IVIG, splenectomy                |
| DIC                            | Treat underlying cause, FFP, platelet transfusion |
| Vitamin K deficiency           | Vitamin K injections                              |
| Liver disease-related bleeding | FFP, Vitamin K, cryoprecipitate                   |

#### Correlation with *Raktapitta*:

| Ayurvedic Feature                    | Modern Equivalent                                |
|--------------------------------------|--|
| <i>Raktapitta – Urdhwaga</i>         | Epistaxis, hematemesis                           |
| <i>Raktapitta – Adhoga</i>           | Hematuria, GI bleeding                           |
| <i>Tiryakgata Raktapitta</i>         | Petechiae, purpura                               |
| <i>Drava-Swabhava of Rakta-Pitta</i> | Increased capillary fragility or platelet defect |
| <i>Pitta Dushti Lakshana</i>         | Burning, inflammation, fever with bleeding       |

#### Results and Findings

- The Ayurvedic condition *Raktapitta* shows strong clinical similarity with modern hemorrhagic disorders such as epistaxis, hematemesis, hematuria, melena, and purpura.
- The *Samprapti* of *Raktapitta*, involving *Pitta*-induced *Rakta Dushti* and increased *Dravata*, correlates with pathophysiological mechanisms like vascular fragility, platelet dysfunction, and coagulation factor deficiencies.
- The Ayurvedic classification:
  - *Urdhwaga Raktapitta* parallels upper GI bleeding, epistaxis, and hemoptysis.
  - *Adhoga Raktapitta* aligns with lower GI bleeding, hematuria, and menorrhagia.
  - *Tiryakgata Raktapitta* resembles systemic purpura and petechiae.
- Ayurvedic herbs and formulations with *Rakta-stambhaka*, *Pitta-shamaka*, and *Raktaprasadana* actions show therapeutic potential in managing bleeding symptoms.
- The emphasis on *Ahara-Vihara*, *Nidana Parivarjana*, and *Rasayana* therapy in Ayurveda provides a comprehensive and preventive approach to recurrent or chronic hemorrhagic conditions.
- Modern diagnostic tools (platelet count, PT, aPTT, coagulation profiles) offer measurable parameters that can complement Ayurvedic diagnostic principles.
- The integrative approach of Ayurveda and modern medicine may enhance clinical outcomes in hemorrhagic disorders when applied judiciously.

#### Discussion

The Ayurvedic concept of *Raktapitta* offers a profound understanding of hemorrhagic conditions, framed within the pathology of *Pitta* vitiating *Rakta Dhatu*. Ancient scholars conceptualized bleeding disorders not merely as physical events but as systemic imbalances involving *Doshas*, *Dhatu*s, and *Srotas*. The vivid classification into *Urdhwaga*, *Adhoga*, and *Tiryakgata* forms based on the direction of bleeding is unique to Ayurveda and closely aligns with the routes of hemorrhage recognized in modern medicine—such as nasal, gastrointestinal, urinary, and cutaneous bleeding.<sup>21</sup>

The pathophysiological explanation in Ayurveda, wherein *Pitta*—by its *Drava* and *Tikshna* properties—liquefies *Rakta* and leads to its overflow through various *Srotas*, resonates with modern understanding of vascular permeability, platelet dysfunction, and coagulation disorders. Disorders like hemophilia (Factor VIII/IX deficiency), idiopathic thrombocytopenic purpura (ITP), and disseminated intravascular coagulation (DIC) mirror the symptomatology of *Raktapitta*, particularly in terms of spontaneous or unprovoked bleeding.<sup>22</sup>

Ayurvedic management of *Raktapitta* includes both *Shodhana* and *Shamana* approaches, tailored according to the dominance of *Dosha*, the route of bleeding, and patient strength. Herbs like *Lodhra*, *Nagakeshara*, *Mochrasa*, and *Durva* act as effective *Rakta-stambhaka* (hemostatic) agents. The use of *Rasayana* therapy to strengthen *Rakta Dhatu* and preserve *Ojas* further reflects Ayurveda's emphasis on disease prevention and tissue regeneration. When interpreted through a pharmacological lens, many of these herbs exhibit astringent, anti-inflammatory, and anti-oxidant activities.<sup>23</sup> Modern medicine provides structured diagnostic tools and emergency management protocols for hemorrhagic disorders, including factor replacement, transfusions, and immunosuppressive therapies. However, it often lacks a systemic, constitution-based approach to recurrent bleeding episodes. Ayurveda, with its individualized treatment protocols, *Ahara-Vihara* regulations, and *Dinacharya-Ritucharya*, adds depth to long-term management and relapse prevention. This holistic view has great relevance in chronic cases and idiopathic bleeding conditions where modern etiology remains unclear.<sup>24</sup>

Hence, an integrative model combining the precision of modern diagnostics and emergency interventions with the systemic balance-focused Ayurvedic approach can offer an effective framework for managing hemorrhagic disorders. The conceptual depth of *Raktapitta*—its symptomatology, etiopathogenesis, and therapeutic guidelines—makes it not only a diagnostic model in Ayurveda but also a clinically relevant parallel to modern hematological conditions.<sup>25</sup>

## Conclusion

The Ayurvedic concept of *Raktapitta* provides a comprehensive understanding of hemorrhagic disorders through the lens of *Pitta* and *Rakta* vitiation, leading to bleeding manifestations via various routes. Its detailed classification, pathogenesis, and management strategies—rooted in principles of *Dosha-Dhatu Samyata*, *Srotas Shuddhi*, and *Rakta-stambhana*—demonstrate striking clinical correlations with modern bleeding disorders such as hemophilia, ITP, and DIC. While modern medicine offers rapid diagnostics and life-saving interventions, Ayurveda contributes a holistic, individualized approach aimed at long-term balance and tissue rejuvenation. Thus, the integrative understanding of *Raktapitta* can enrich modern hematological practice and pave the way for more personalized and preventive strategies in the management of bleeding disorders.

## Conflict of interest -nil

## Source of Support -none

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