



## **A Panorama view on the Concept of Diet - Regimen in Haemophilia (Raktapitta)**

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### **ABSTRACT**

*Haemophilia is a serious hereditary hemorrhagic disorder in which Heam means (blood) and philia means (love). Haemophilia A and B caused by the deficiency or dysfunction of the factor VIII proteins and factor IX respectively, and are characterized by persistent and excessive bleeding after mild trauma or even spontaneously also. There is another type of Haemophilia which is called Haemophilia C is caused by a lack of clotting factor XI and this is relatively not common. Haemophilia may also appear as a result of age or childbirth but it resolves with proper treatment and care. According to Ayurved, Haemophilia can be correlated with Raktapitta due to their similar sign and symptoms. In Raktapitta, Rakta gets vitiated by dusita pitta in Yakrut and Pleeha (liver and spleen) and thus affects the raktawahashrotas (Blood channels). So, Here I am mainly focusing on the dravyas which are mentioned as pathya aahar (wholesome diet like Shali, Shashteeka, Neevar, Shyamak, Kordush etc and vihar (Regimen like lepa of Chandan and Priyangu, the touch of beautiful and pleasing women etc) as mentioned in Charak samhita in Raktapitta disease.*

**Keywords:** Haemophilia, Ayurved, Charak samhita

Received 19.12.2021

Revised 29.01.2022

Accepted 23.02.2022

### **INTRODUCTION**

Haemophilia is a common hereditary bleeding disorder in which there is a partial or total lack of essential blood clotting factors (i.e., Factor VIII and IX). It is a lifelong disorder that results in excessive bleeding and many times spontaneous bleeding, which very often internal. Haemophilia is caused by the fault or mutation in one of the gene that determine how the body makes blood clotting factor VIII or IX. These genes are located on X chromosomes.[1]

Prevalence rate- USA and Brazil report the highest prevalence of over 4 per 1,00,000 population. In comparison, the number of prevalent cases in India is 0.9 per 1,00,000 population. According to W.H.O

In Ayurved, Raktapitta can be considered as Haemophilia because Raktapitta is also a bleeding disorder which is caused by vitiation of two elements in the body i.e., Rakta and pitta togetherly due to their Ashray-Ashrayee bhav. Raktapitta is a Raktajvikar which is caused due to dushti of Raktawahashrotas. When Rakta gets vitiated by pitta it increases in amount due to ushna guna of pitta dosh which leads to flows out from natural orifices like Nose, Mouth, eye, ear, urethrovaginal etc. In simple words any bleeding that takes place because of indigenous causes is called Raktapitta. Acharya Charak has mentioned Raktapitta as 'Mahagada' which means the disease which is not easily treatable.[2]

Ayurvedic classics has given the importance to diet and regimen as a part of chikitsa. Pathya and Apathya has a major role in the management of diseases. Pathya is that which brings the vitiated doshas to normal state while Apathya are those which causes vitiation of doshas. Our one of the Acharaya Vaidya Lolimbraj stated that if a patient takes wholesome diet (Pathya Aahar) then there is no need of medicine and if a patient continuously taking Unwholesome diet (Apathya Aahar) then also there is no need of medicine. To study and analyse the Pathya Aahar (wholesome diet) in Haemophilia with respect to Raktapitta and analyse Pathyavihar (wholesome regimen) in Haemophilia with respect to Raktapitta.

**MATERIAL AND METHODS**

**Etiology of Haemophilia**

Haemophilia is an inherited condition and is caused due to the deficiency of clotting factors in the blood. It is almost caused by the fault or mutation in one of the genes that determine how the body makes blood clotting factor VIII or IX. These genes are located on X-chromosomes. Both Haemophilia A and B are inherited via an X-linked recessive pattern where 100% of females born from affected fathers will be carriers, and none of the males born will be affected. Female carrier mothers have a 50% chance of having affected males and a 50% chance of having carrier females. Females could also be affected if there is a complete inactivation of chromosome X through lyonization, partial or complete absence of chromosome X such as in Turner Syndrome or if both parents carry the abnormal gene.[3][4]

**Types of Haemophilia [5]**

Haemophilia A and B are classified as mild, moderate and severe, depending on the amount of clotting factor VIII or IX in the blood.

Mild Haemophilia	5-40% of normal clotting factor
Moderate Haemophilia	1-5% of normal clotting factor
Severe Haemophilia	<1% of normal clotting factor

**Sign and symptoms**

Haemophilia can be mild, moderate, or severe, depending on how much clotting factor is in the blood. Patients with severe haemophilia (< 1% of normal factor VIII levels) present with spontaneous bleeding into skin, muscle and joints. Retroperitoneal and intracranial bleeding is also a feature. Patients with mild and moderate haemophilia (factor VIII levels 1–40%) present with the same pattern of bleeding. Bleeding in severe haemophilia is typically musculoskeletal which bleeds into large joints, especially knees, elbows, ankles and hips. Haematomas of muscle are also characteristic, most commonly in the calf and psoas muscles. If prior treatment is not given to stop bleeding, a hot, swollen and very painful joint or muscle haematoma develops. Recurrent bleeding into joints leads to synovial hypertrophy, destruction of the cartilage and secondary osteoarthritis. Complications of muscle haematomas depend on their location. Infants with severe haemophilia have an increased risk of intracranial haemorrhage. Children with mild to moderate haemophilia may not have any signs or symptoms at birth especially if they do not undergo circumcision. Their first symptoms are noted about 6 months old when superficial bruising from falls as they learn to walk. Swelling and bruising from bleeding in the joints (haemarthrosis), soft tissue, and muscles may also occur. Females who are carriers usually have enough clotting factors from their one normal gene to prevent serious bleeding problems, though some may present as mild haemophiliacs.

Signs of external bleeding may include:

Bleeding in the mouth as a result of a cut or bite, or as a result of a tooth being lost

- Bleeding from nose for no obvious reason
- Massive bleeding from a minor cut
- Bleeding from a cut that resumes after cessation for a short time

Signs of internal bleeding may include;

- Blood in the urine
- Blood in the stool
- Large bruises

Bleeding in the knees, elbows, or other joints is another prevalent kind of internal bleeding in patients who have haemophilia. This bleeding can happen even if there is no visible damage. The bleeding creates tightness in the joint at initially, but there is no actual pain or visual indications of bleeding. The joint then becomes swollen, hot to touch, and painful to bend. Swelling continues as bleeding continues. Eventually, movement in the joint is temporarily lost. Pain can be severe. Joint bleeding that isn't treated quickly can damage the joint. Internal bleeding in the brain is a very serious complication of haemophilia. It can happen after a simple bump on the head or a more serious injury.[6]

**Nidan (Causes) of Raktapitta [7]**

**Aharaj-**• Rasa - Excessive use of Amla (sour), Katu (pungent), and Lavana (saline) diets

- Guna - Excessive consumption of Vidahi (inadequate digestion resulting in throat burning), Tikshna (sharp), Ushna (hot), and Kshara (Alkalis)

**Viharaj-**• Aatapa - Excessive exposure of sun

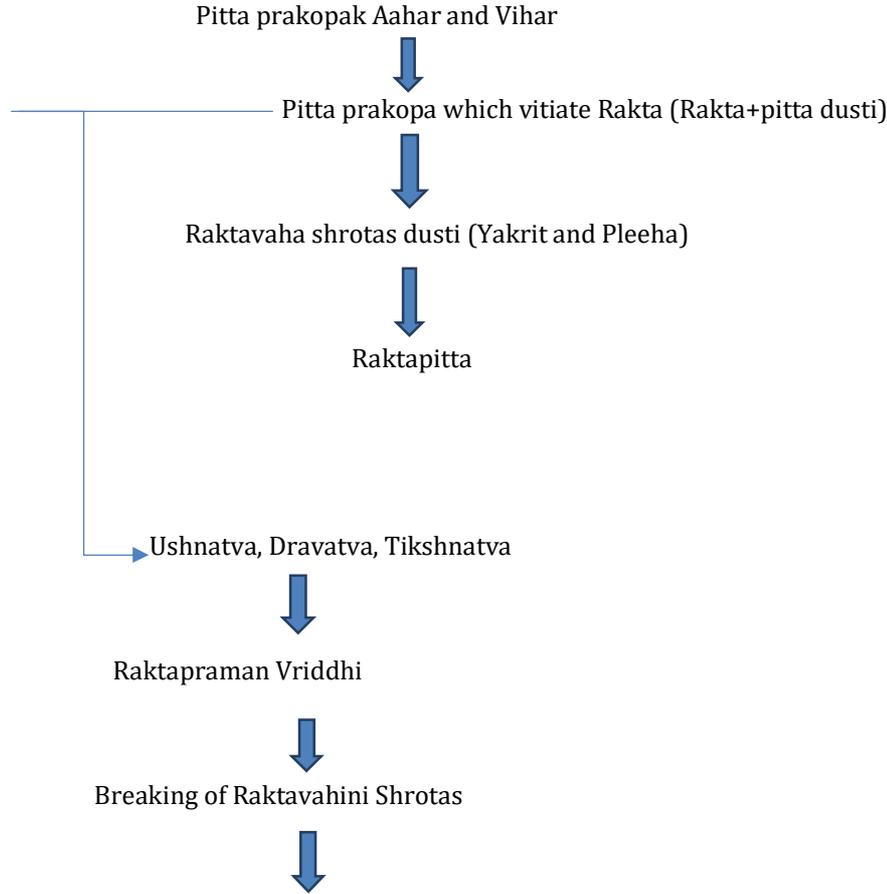
- Vaayama - Excessive physical exercise
- Vyavaaya - Excessive indulgence in sexual activities
- Adhwa - Excessive walking

**Manas-**• Shoka - Excessive grief

- Kopa - Anger

Other • Excess Virechana

### Samprapti (Pathogenesis) of Raktapitta [8]



Flows out of natural orifices (Urdhvaga, Adhoga and Tirayag marg)

### Sign and Symptoms of Raktapitta

- Urdhvaga - Raktapitta is a condition in which tainted or vitiated blood bleeds upwards from orifices, such as Mukha (mouth), Karna (ears), Akshi (eyes), Nasa (nose) (nostrils). Snigdha and Ushna guna are the causative attributes for the vitiation of kapha and pitta.
- Adhoga - In Adhoga Raktapitta in which polluted or vitiated blood is bled downwards and from downward passages or orifices, such as the Guda, Yoni, and Mootra margas. Rooksha and Ushna guna are the characteristics that lead Vata and Pitta to become vitiated.
- Ubhaya or Tiryak - The manifestation is subcutaneous here when all the Doshas are vitiated and circulating in the blood stream.[9]

### PATHYA AAHAR (IDEAL FOODS) IN RAKTAPITTA/ HAEMOPHILIA [10]

पथ्यं पथोऽनपेतयद्यच्चोक्तं मनसः प्रियम्

यच्चाप्रियमपथ्यं च नियतं तन्न लक्षयेत् - (Ch.Su.25/45)

According to Acharaya Charak the Aahar-vihar which is beneficial and nutritional to the body and also give the happiness to the mind is known as Pathya and opposite to that is known as Apathya.

#### Shooka dhanya Varga

- Shalidhanya (*Oryza sativa*)
- Shashtika shali (*Oryza sativa*)
- Neevar (*Hygroryza aristata*)
- Kordusha (kodo) (*Paspalum scrobiculatum*)
- Prasantika (similar to syamak)
- Syamaka (*Echinochloa frumentacea*)
- Priyangu (*Aglaia elaeagnoides*)

#### Shami dhanya Varga

- Mudga (*Vigna radiata*)

- Masoor(*Lens culinaris*)
- Chanaka(*Cicer arietinum*)
- Makustha(*Phaseolus aconitifolius*)
- Adhaki-phala(*Cajanus cajan*)

#### Shaaka Varga

- Patola(*Trichosanthes dioica*)
- Neemba(*Azadiracta indica*)
- Vetagra(*Salix caprea*)
- Leaves of Plaksha (*Ficus lacor*)
- Leaves of Vetasa(*Salix caprea*)
- Kiratikta (*Swertia chirata*)
- Gandir (*Canthium parviflorum*)
- Kathillaka (*Borrheavia diffusa*)
- Flower of kovidar (Bauhinia variegata)
- Flower of Kashmarya (*Gmelina arborea*)
- Flower of Shalmali (*Salmalia malabarica*)

#### Mansa rasa Varga

- Paravat
- Kapot
- Lava
- Raktaksha
- Varataka(bater)
- Sasa
- Kapinjala(goraiyya)
- Ena
- Harina
- Kalapucchaka(harina)

One or more of the above meat soups should be mixed with amla Dadima rasa and Amalaki rasa. If cannot add this then one should fry this with ghrith and mixed with sharkara.

#### Awasthika Prayoga of Mansarasa

In presence of Vibandha-

Shasha mansarasa+ Vastuka

In Vata predominant Raktapita-

Tittar mansarasa+ Udumbar phala rasa

Mayur mansarasa+Plaksha kasyha

Kukutta Mansaras+Nyagrodha kashaya

Vartaka Mansarasa+Bilwa+Utpala kashaya

#### Phala Varga

- Amalki(*Phyllanthus emblica*)
- Dadima(*Punica granatum*)
- Munnaka(*Vitis vinifera*)
- Falsa(*Grewia asiatica*)
- Vatsaka(*Holarrhena antidysenterica*)
- Madhuka(*Madhuca longifolia*)

#### Ambu Varga

Water boiled with Hribera, Chandan, usheer, Musta, parpat.

- **Shritasheetta jala**
- **Tarpan** - water boiled with Khajura,Mrudvika,Madhuka,Parushaka with sharkara
- **Laja Tarpan**-Laja+Ghrith+Madhu

#### Dugdha Varg

Go dugdha and Aja Dugdha (Cow and goat)

#### Ghrith Varga

Goghrit And Aja Ghrith (cow and goat)

#### Ikshu Varga

Ikshu rasa(Sugarcane juice)

**Kritanna Varga**

Yusha (soups) of Mudga (*Vigna radiata*), Masoora (*Lens culinaris*), Chanaka (*Cicer arietinum*), Makustha (*Phaseolus aconitifolius*), Adhaki (*Cajanus cajan*).

**Aharaupyogi Varga**

Madhu(Honey),Sharkara( sugar).

**PATHYA VIHAR(REGIMEN) IN RAKTAPITTA\HAEMOPHILIA**

धारागृहं भूमिगृहं सुशीतं वनं च रम्यं जलवातशीतम्]

वेदूर्यमुक्तामणिभाजनानांस्पर्शाश्च दाहे शिशिराम्बुशीताः||**(Ch.chi 4/106)**

Quite cool water chamber, underground chamber, beautiful park cooled with watery air, contact of utensils made of vaidurya, pearls, gems cooled with cold water-these are used in case of burning sensation. Moreover, the beds and chairs be covered with leaves and flowers of aquatic plants, cold silk cloth, banana leaves and leaves of lotus and water lily. Touches of the charming women anointed with priyangu and candana, and moist and cool breezes from lotus and water lily are commended for use in burning sensation.Visit to rivers and lakes, glaciers, ponds having water lily and lotus flowers, favourite and soothing narratives pacify Raktapitta.

**DISCUSSION**

The number of prevalent cases of Haemophilia in India is 0.9 per 1,00,000 population. The Statistics shows that 75% of Haemophilia population in India cannot even afford the costly treatment. The proper and Priceless Diet and Regimen could be a hope for prevention as well as longevity of life of a patient. Acharya Vagbhata describes the importance of appropriate diet and regimen in treatment . He says – without following proper diet and regimen what is the use of giving medicine but if appropriate diet and regimen is followed along with medicine in disease condition then the treatment is complete.

**CONCLUSION**

Ahara and vihara are the primary foundations upon which an individual's life is built. It is widely believed that diet has no causal association with disease. However, Ayurveda considers diet and regimen to be the primary causes of all diseases. Dietary and lifestyle changes may operate as an adjuvant to reduce the side effects of common drugs, as well as work in tandem with them to treat the disease. Thus, an appropriate Diet and Regimen which is described previously in the treatment of Haemophilia\Raktapitta is a type of Adjunctive treatment which the patient should follow with the parallel treatment.

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**CITATION OF THIS ARTICLE**

Smita Rai, Rekha Parmar. A Panorama view on the Concept of Diet - Regimen in Haemophilia (Raktapitta). Bull. Env. Pharmacol. Life Sci., Vol 11[3] Feb 2022 : 159-163.