

ROLE OF *KUSHMAND AVALEHA* (ASH GOURD PORRIDGE) IN THE MANAGEMENT OF *RAKTAPITTA* W.S.R TO HAEMOPHILIA: A REVIEWLangade J. U.¹, Jain S.S.²¹. Vd. Jivankumar U. Langade, PG scholar, Swasthavritta and Yoga dept. Govt. Ayurved college, Nagpur, India². Vd. Sumeeta S. Jain, HOD, Swasthavritta and Yoga dept. Govt. Ayurved college, Nagpur, IndiaCorresponding Author: jivanlangade@gmail.com<https://doi.org/10.46607/iamj1910072022>

(Published Online: July 2022)

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Article Received: 26/05/2022 - Peer Reviewed: 14/06/2022 - Accepted for Publication: 04/07/2022

**ABSTRACT**

Raktapitta (bleeding disorder) manifests as an excessive bleeding disorder and can be correlated with bleeding disorder hemophilia. Ayurveda is having a number of dosage forms, where *ahara dravyas* have been used as *pathya kalpana*. *Kushmand Avaleha* (Ash Gourd Porridge) is recommended as *Rasayana*. It is used in *Pittaja Prakriti*, diseases having the origin of *Pitta Dosha*, and also useful in the summer season which is having dominance of pitta. **Aim and Objective:** This work has been done to evaluate the role of *Kushmand Avaleha* (Ash Gourd Porridge) in the management of *Raktapitta* w.s.r to hemophilia. **Material and methodology:** A review of Ash Gourd was done from various textbooks, classical *samhitas*, research papers, and clinical trials. **Discussion:** *Raktapitta* is mainly the disorder of *Pitta Doshas*. *Kapha* and *Vata Doshas* also have an important role in *Raktapitta*. The overall effect of the *Kushmand Avaleha* was found to be having *Tri Doshar* properties. The drug is having more *Madhur Teekta Kashay Rasa*, *Laghu-Rooksha Gunas*, *Ushan Veerya*, and *Kapha Vata shamak, strotorodh* reducing properties and restored the *prakrit Gunas* of *Pitta*. **Conclusion:** From the above discussion It has been concluded that Ash gourd porridge (*Kushmand Avaleha*) is beneficial in the management of *Raktapitta* and can be used as an Ayurvedic supplement along with standard anti-hemophilic drug treatment.

Keywords: *Raktapitta*, Haemophilia, Ash gourd porridge (*Kushmand Avaleha*)

INTRODUCTION

Haemophilia is an inherited x-linked single gene bleeding disorder, occurring due to mutation in either the coagulation factor 8 gene (haemophilia A) or coagulation factor 9 gene (haemophilia B), resulting in the deficient synthesis of coagulation factor 8 and 9. The females with this defective gene shall be carriers and mostly the symptoms are noticed in the male members.^[1] The meta-analysis showed that more than 1,125,000 men around the world have inherited bleeding disorder, and 418000 of those have a severe version. Previously, 400,000 people globally were estimated to have haemophilia.^[2] As per the world federation of haemophilia 2016 global survey, India harbours the highest number of patients with haemophilia and a prevalence of 1/10000 male birth.^[3] Common complications of haemophilia include chronic joint disease primarily as a result of bleeding into the joints; and infections transmitted primarily through the infusion of factor replacement and other blood products. Currently, the replacement of congenitally deficient factors is the mainstay of treatment for haemophilia. The major complication of the use of clotting factor concentrates is the development of an antibody against factors called inhibitors that neutralise infused factor which further inhibits effective management of bleeding episodes, this places the patient with haemophilia at greater risk of target joint development and progressive arthropathy that can result in permanent disability. The debilitating joint disease often results in the restriction of patients' activity and reduction in productivity and has a negative impact on their quality of life (QOL). Untreated haemophilia patients, particularly those with severe disease, used to experience early mortality.^[4] Although hemophilia affects only a small

portion of the population, it is associated with high aggregate cost and imposes a high financial burden on individuals, healthcare systems, and society in general. To ensure optimal treatment outcomes and disease management, there is a critical need to understand the utilisation of healthcare resources in the treatment of haemophilia. In Ayurveda, this type of bleeding disorder is well explained in the 4th chapter of *Chikitsasthan* of *Charak Samhita*, under the name *Raktapitta*. As the *Raktapitta* is a bleeding disorder and in this, there is an *Ashray-Aashrayee Bhava Sambandha* of *Rakta* and *Pitta* Charakacharya describes important causative factors such as regular and excessive intake of *Amla Lavan Katu Rasatmak* and *Tikshna Ushna Gunatmak ahar*, behavioural factor such as working in the high-temperature atmosphere, mental factors such as anger, grief, fright like due to modern lifestyle many of them got changed of their food and behavioural habits such as having more spicy food, incompatible food, and stressful life these are increased in the present era. regular consumption of these causative factor naturally aggravates the vitiation of *pitta*, so only because of these *Pitta* mixed with aggravated *Rakta* which acquirer's its smell and colour and ultimately increases the frequency of bleeding tendency in *Raktapitta*.^[5] *Kushmanda* is the best *Brimhana Dravya*. Its properties are *Madhura Rasa*, *Sheeta Virya*, and *Madhur Vipaka* which help in subsiding *Pitta* and increasing *Rakta Dhatu*. *Pitta* being the main causative factor for *Raktapitta* can be subsided by *Kushmanda*.

Aim and Objective: This work has been done to evaluate the role of *Kushmand Avaleha* (Ash Gourd Porridge) In the management of *Raktapitta* w.s.r to hemophilic.

Material and methodology:

Review:

Table 1: Ingredients of Kushmanda avaleha⁽⁶⁾

	English Name	Rasa	Guna	Virya	Vipak	Latin Name	Quantity In Kg/ Gm
1	Ash Gourd	Madhur	Laghu, Snigdha	Sheet	Madhur	Benincasa Hispida	200 Parts
2	Water					-	800 Parts
3	Clarified Butter					-	32 Parts
4	Sugar					-	200 Parts
5	Long Pepper	Katu	Laghu, Tikshna	Ushna	Madhur	Piper Lonum	8 Parts
6	Zinger	Katu	Guru Ruksha Tikshna	Ushna	Madhur	Zinziber Officinale	8 Parts
7	Cumin Seeds	Katu	Laghu Rooksha	Ushna	Katu	Cuminum Cyminum	8 Parts
8	Coriander Seeds	Kashay Tikta Madhur	Laghu, Snigdha	Ushna	Madhur	Coriandrum Sativum	1 Part
9	Malabar Leaf	Katu Tikta Madhur	Laghu Ruksha Tikshna	Ushna	Katu	Cinnamomum Tamala	1 Part
10	Cardamom	Katu Madhur	Laghu Ruksha	Sheet	Katu	Elettaria Cardamomum	1 Part
11	Black Pepper	Katu	Laghu, Tikshna	Ushna	Katu	Piper Nigrum	1 Part
12	Bark Cinnamon	Madhur Katu Tikta	Laghu Tikshna	Ushna	Madhur	Cinnamomum Verum	1 Part
13	Honey					-	16 Parts

Preparation of Kushmanda avaleha:

Kushmanda avaleha was prepared as per *Sharangdhar Samhita*. *Kushmanda* or white pumpkin collected from the local market. The outer skin of the *Kushmanda* was removed, then cut into small pieces & boiled with 4 parts of water. Then well-boiled pulp was strained through a clean dry cloth and the remaining liquid part was separated. The paste was fried with *ghruta* till it becomes brown. Fried paste of white pumpkin was added to a mixture of sugar and separated liquid. The mild heat was applied till the desired appearance of *paka siddhi lakshana*. (Appearance of three threads when a drop of the above mixture is kept in between

the thumb and index finger). Lastly, *Prakshepa dravyas* were mixed in the above mixture in the lukewarm stage. Once *avaleha* achieves room temperature, honey was added and then mixed uniformly.

Rakta-Pitta: When the *Pitta Dosha* with *Ushna-Teekshna Gunas* gets more vitiated due to the excessive intake of the different *Hetus* with similar *Gunas*; it vitiates the *Rakta Dhatu* being its *Ashray Sthan*. This *Pitta vitiates Rakta Dhatu* increases in the amount due to the *Ushna Guna* of *Pitta* it starts flowing out of the body from different outlets – Upwards & downwards and *Tiryak*. This condition is known as '*Raktapitta*'.^[7]

NIDANA (Causes)^{[8][9][10]}

Table 2: These are known as aggravating factors – they tend to increase the frequency of bleeding tendency in a person with haemophilia.

Aharaj Hetu	Viharaj Hetu	Manas Hetu
1. Rasa- Excessive consumption of Diet that are Amla (sour), Katu (pungent), Lavana (saline) 2. Guna - Intake of excessive Vidahi (Improper digestion leading to the burning sensation of food), Tikshna (Sharp), Ushna (Hot), Kshara (Alkalis)	1. Aatapa - Excessive exposure to the heat of the sun 2. Vyayama - Excessive physical exercise 3. Vyavaay- Excessive indulgence in sexual activities 4. Adhwa - Excessive walking	1. Shoka - Excessive grief 2. Kopa – Anger

Table 3: Samprapti Ghatak ^[11]

1	<i>Dosha</i>	<i>Pitta</i>
2	<i>Dushya</i>	<i>Rakta</i>
3	<i>Strotas</i>	<i>Raktavaha</i>
4	Adhishthan-	
	A. <i>Urdhva Marga</i>	<i>Nasika, Netra, Karna, Mukha</i>
	B. <i>Adhomarga</i>	<i>Upastha, Yoni, Guda</i>
	C. <i>vyapak</i>	<i>Samasta romkup, twacha Urdhvaadha marga</i>

POORVA ROOPA ^[12]

Table 4: These are prodromal features during bleeding episodes in Haemophilia (*Raktapitta*) according to Ayurveda

1	<i>Anannabhilasha</i> -	Loss of interest in food
2	<i>Bhuktasya vidahata</i>	Burning/very quick digestion of consumed food
3	<i>Sukta Amla Udgara</i>	Sour belching or belching having the taste of fermented liquid
4	<i>Swarabheda</i>	Hoarseness of voice
5	<i>Paridaha</i>	The feeling of burning sensation in the body
6	<i>Klama</i>	Fatigue
7	<i>Shiro gowrava</i>	Heaviness of head
8	<i>Kasa</i>	Cough
9	<i>Swasa</i>	Dyspnoea
10	<i>Bhrama</i>	Giddiness

Bheda (Classification) - Lakshanas (Signs and Symptoms) ^[13]

Table 5: There are 7 types of *Raktapitta* - As there is *Raktadushti* in haemophilia so the signs and symptoms of *Doshas* are manifested in the blood according to *Dosha* predominance they are presented as follows

Sr no	Dosha predomi-nance	signs and symptoms manifested in the blood according to Dosha predominance	Based on the direction of bleeding
1	<i>Vataja</i>	<i>Shyava, Aruna, Saphena, Tanu, Rooksha</i>	<i>Adhog Raktapitta</i>
2	<i>Pittaja</i>	<i>Kashaya, Mechaka, Agara dhuma Anjana</i>	
3	<i>Kaphaja</i>	<i>Sandra, Sa pandu, Sa sneha, Picchila</i>	<i>Urdhavga Raktapitta</i>
4	<i>Vata Pittaja</i>	When vitiated by 2 Doshas, the signs and symptoms of the aggressive two Doshas are manifested in the blood.	
5	<i>Pittakaphaja</i>		
6	<i>Kapha vataja</i>		
7	<i>Sannipataja</i>	When vitiated by all the 3 Doshas then the signs and symptoms of all the 3 Doshas are manifested in the blood	<i>Tiryak Raktapitta</i>

HAEMOPHILIA^[14]

Haemophilia is an x-linked genetic disorder where the blood clotting factor is defective. The female with these defective genes shall be carriers and mostly the symptoms are noticed in male members. There are mostly two types of haemophilia A and B, which are classified as mild, moderate, and severe depending on the number of clotting factors 8 and 9 in the blood.

Severity level - % of clotting factor,
mild - 5-40%, moderate -
1-5%, severe - >1%

Symptoms

- **Mild haemophilia:** often hardly causes any problems in everyday life. bleeding only after surgery or a deep cut lasts longer than normal.
- **Moderate haemophilia:** may have occasional long-lasting bleeding, but usually only following surgery or an injury. Only rarely will there be no apparent cause.
- **Severe haemophilia:** often have internal bleeding that causes pain. Bleeding for no known reason is typical, especially in the joints of the hand, shoulder, hip, knee, ankle, or elbow. Arm and leg muscles are often affected too. Bleeding in the brain, throat or abdomen is especially dangerous. Severe haemophilia is noticeable from a very young age: Babies bruise very easily. As the children learn to walk and put more strain on their joints and muscles, bleeding starts occurring there. Bleeding in joints is very painful. The joints become swollen and hurt when moved. They often become inflamed as well.

Treatment- Haemophilia treatment involves the use of injections to replace the missing clotting factor.

DISCUSSION

The probable mode of action of *Khanda Kushmanda Avaleha Raktapitta* is mainly the disorder of *Pitta Doshas*. *Kapha* and *Vata Doshas* also have an important role in *raktapitta*. So, the drug must be analysed based on its *Tri -Doshahar* properties. In the ingredients of *Khanda Kushmanda Avaleha*, there is a

predominance of *Madhur, Teekta, Kashay rasa* followed by *Katu rasa*. *Madhur Teekta Kashay rasa* helped to pacify the *Pitta Doshha*. *Kashay Teekta* and *Katu rasa* helped to remove *strotorodh*. Most of the drugs having *Laghu Rooksha Guna* help to reduce *strotorodh* as well as *Pitta shaman*. *Rooksha Guna* might have reduced the *Dravya Guna* of *Pitta* there by reducing pressure in *Raktavaha strotas* and thereby reducing the chances of rupture of the blood vessel. Few drugs having *Guru Guna* might help to pacify *Pitta Doshha*. Some drugs having *Ushna Veerya* might help in *Kapha Vata* predominant *Lakshans* of *raktapitta* and also cleared *strotorodha*. Most of the drugs having *Madhur Veepak* helped to pacify *Pitta* and *Vata Lakshanas*. If we analyse the overall effect of the drug it is found to be having *Tri-Doshar* properties. The drug is having more *Madhur Teekta Kashay Rasa, Laghu-Rooksha Gunas, Ushan Veerya, and Kapha Vata shamak, strotorodh* reducing properties and restored the *prakrit Gunas* of *Pitta*. *Kushmanda Avaleha* contains long pepper, black pepper, and ginger collectively known as *Trikatu* in very small quantities which by itself do not show typical drug activity but when used in combination with *Kushmand* which is the main drug of *Kushmanda Avaleha* enhances the activity of this drug by increasing the bioavailability of drug across the membrane.

CONCLUSION

Haemophiliac which is well explained in modern medicine can be well equated with *Raktapitta* told in *Ayurvedic* classics in the aspects of etiology, etiopathology, clinical manifestation, and treatment. Especially various modern treatment and *ayurvedic Raktastambhaka Oushadhi* helps to alleviate bleeding episodes in haemophilia. Along with medication, *Pathya Ahara* and *Vihara* play a significant role in arresting bleeding episodes.

The drug is having more *Madhur Teekta Kashay Rasa, Laghu-Rooksha Gunas, Ushan Veerya, and Kapha Vata shamak, strotorodh* reducing properties and restored the *prakrit Gunas* of *Pitta* and hence *Kushmanda avleha* can be used as an ayurvedic supplement in the patient of haemophilia (*Raktapitta*).

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Source of Support: Nil

Conflict of Interest: None Declared

How to cite this URL: Langade J. U. & Jain S.S: Role of Kushmand Avaleha (Ash Gourd Porridge) In the Management of Raktapitta w.s.r to Haemophilia: A Review. International Ayurvedic Medical Journal {online} 2022 {cited July 2022} Available from: http://www.iamj.in/posts/images/upload/1744_1749.pdf