

# Effect Hibiscus sabdariffa L. (Ambulpala), Rathkaralheba Kashaya and Roghan-e-Khas Guda Varti in Raktarshas (Bleeding Haemorrhoids) - A Case study

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#### Abstract

According to Ayurveda, Arshas is a disease which tortures patient's vital force (Prana) as an enemy. Raktarshas is a type of Arsha with pile masses like Nyagrodha Praroha (aerial prop roots of banyan tree), Kakanantika (seeds of Abrus precatorius), Vidruma (corals) and presents Pitta Lakshana (the clinical features of *Pittaja Arshas*). Raktarshas can be corelated with bleeding haemorrhoids. The commonest symptoms of bleeding haemorrhoids are painless bleeding from the anal area, anal itching, pain in the anal area, swelling and feeling of rectal fullness or a lump at the anus. Sri Lankan traditional physician family Weerasinghe uses Hibiscus sabdariffa L (Ambulpala) as an Anulomana Dravya in treatment of Raktarshas. Sri Lankan traditional medical practitioners recommend Rathkaralheba Kashaya to treat patients suffering from Raktarshas. In Ayurveda hospitals Roghan-e-Khas is frequently used in treating haemorrhoids. So far, no known scientific study has been conducted to evaluate the effects of these treatments. Therefore, the present study was undertaken. A 55 years old female with a 12-year history of Raktarshas (bleeding heamorrhoids) was treated with this treatment regimen for 15 days. On Day 1 Anulomana (medicaments which restores and facilitates the physiological direction of various flows within the body like flatus and stool) was conducted with Hibiscus sabdariffa L. and from Day 2 to 15 the patient was treated with oral administration of Rathkaralheba Kashaya with rectal administration of Roghan-e-Khas Guda Varti. The response to the treatment was recorded and therapeutic effects were evaluated through symptomatic relief. On day 15, it was observed that Kandu, Ruja, Daha, Rectal fullness, Raktasrava were completely relieved and number of pile masses were partially relieved. It is concluded that selected treatment regimen is effective in Raktarshas (bleeding haemorrhoids).

**Keywords**: Ambulpala, Bleeding haemorrhoids, Hibiscuss sabdariffa L., Pulicha Keerai, Raktarshas, Rathkaralheba Kashaya, Roghan-e-Khas Guda Varti.

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#### Introduction:

Raktarshas is a disease described in Avurveda.<sup>[1]</sup> According to Susrutha Samhitha pile masses of Raktarshas resemble Nyagrodha Praroha (aerial prop roots of banyan tree), Kakanantika (seeds of Abrus precatorius) and Vidruma (corals). Clinical features of Pittaja Arshas may also be present. <sup>[2]</sup> When pile masses are pressed with hard stools, copious amount of vitiated blood will be excreted. Raktarshas can be corelated with bleeding haemorrhoids. Painless bleeding from the anus, anal itching, pain in the anal area, swelling and feeling of rectal fullness or a lump at the anus are the common symptoms. Internal most hemorrhoids are located above the pectinate line and external hemorrhoids arise below the pectinate line. Internal hemorrhoids are graded into four grades based on the degree of prolapse below the pectinate line into the anal canal.<sup>[3]</sup>

Chakradatta describes that Arshas should be treated with drugs and food which are having the properties of Anulomana (which acts upon Apakwa Mala and make it Pakwa, breaks Mala and bring them down without any obstruction) and Agni Bala Vardhana (promote strength of digestive fire). [4] Hibiscus sabdariffa Malvacea; Sanskrit (Family: name: Ambasthaki; Sinhala name: Ambulpala; Tamil name: Pulicha Keerai) is an annual/perennial growing to about 2m to 3m. It has been used traditionally as a food, in herbal drinks, in hot and cold beverages, as a flavouring agent in the food industry and as a herbal medicine.<sup>[5]</sup> People in Badulla District of Sri Lanka use this plant as a vegetable. Traditional physician family Weerasinghe use this plant to treat patients suffering from Raktarshas as an Anulomana Dravya. Traditional medical practitioners recommend Rathkaralheba Kashaya to treat patients suffering from Raktarshas. In Ayurveda hospitals, Guda Varti prepared with Roghan-e-Khas is frequently used in treating haemorrhoids. No scientific study has been conducted to evaluate the effects of these treatments. Hence it was decided to observe effect of these treatments in Raktarshas (bleeding haemorrhoids)

#### **Case Report**

A 55- year- old woman suffering from Raktarshas (bleeding haemorrhoids) was admitted to National Ayurveda Teaching Hospital, Borella, Sri Lanka. Her complaints were severe pain around the anus and intermittent rectal bleeding while defecation, for the last 12 years. Other complains were burning sensation while passing stools and itching sensation, occasional discharge from anus, back pain and hardened stools. Selected patient was thoroughly examined, digital rectal examination and proctoscopy were carried out. The patient's written consent was obtained for publication of the data. Severity of the symptoms were recorded using a specially prepared grading scale as given below.

#### 01.Kandu (anal itching)

- 0 No anal itching
- 1 Occasional anal itching
- 2 Intermittent anal itching
- 3 Often feel anal itching
- 4 Always feel anal itching

#### 02.Ruja (pain in anal region)

- 0 No pain in anal region
- 1 Occasional pain in anal region
- 2 Intermittent pain in anal region
- 3 Often feel pain in anal region
- 4 Always feel pain in anal region



#### **03**.*Daha* (burning sensation in anal region)

- 0 No burning sensation in anal region
- 1 Occasional burning sensation in anal region
- 2 Intermittent burning sensation in anal region
- 3 Often feel burning sensation in anal region
- 4 Always feel burning sensation in anal region.

#### 04.Feeling rectal fullness or a lump at anus

- 0 No feeling rectal fullness or a lump at the anus
- 1 Occasional feeling of rectal fullness or a lump at the anus
- 2 Intermittent feeling of rectal fullness or a lump at the anus
- 3 Often feeling of rectal fullness or a lump at the anus
- 4 Always feeling of rectal fullness or a lump at the anus

# **05.Number of Pile masses**

- 0 No pile masses protrude from the anus
- 1 One pile mass protrudes from the anus
- 2 Two pile masses protrude from anus
- 3 Three pile masses protrude from anus
- 4 More than three pile masses protrude from the anus

# 06. Arshankurapratiti (Degree of prolapse of haemorrhoids)

- 0 No haemorrhoids
- 1 Haemorrhoid bulges into the anal canal but does not prolapse and may bleed
- 2 Haemorrhoid protrudes with straining but spontaneously return to original position
- 3 Haemorrhoid protrude without straining and requires the patient to push them inside manually
- 4 Haemorrhoid protrudes from the anus all the time

#### 07. Raktasrava (Bleeding haemorrhoids)

- 0 No bleeding
- 1 Slight bleeding but not visible to naked eyes (occult blood)
- 2 Slight bleeding but visible to naked eyes
- 3 Moderate bleeding and visible to naked eyes
- 4 Severe bleeding

# **Therapeutic Intervention:**

Selected patient was treated for a period of 15 days. On Day 1 patient was treated with Anulomana using Hibiscuss sabdariffa. 100gm of Anulomana Aushada was administered to the patient early in the morning (6 am), to an Before empty stomach. administering Anulomana Aushada, the patient was subjected to Bahira Snehana (external oleation) and Swedana (fomentation). External oleation was done by applying 30 ml of sesame oil on the lower abdomen. Fomentation was done by using steam emitting from a towel dipped in boiling water. According to the traditional method, patient was made to consume warm water after administration of Anulomana Aushada, to facilitate expulsion of faeces. Number of bouts of bowel movements, colour and condition of the feaces was recorded. On Day 2-15 patient was treated with 120ml of Rathkaralheba Kashaya orally twice a day and application of Roghan-e-Khas Guda Varti into the anus once a day. After applying Sarvavishadi oil around the anus, Roghan-e-Khas Guda Varti was inserted into the anus by keeping the patient in lithotomy position.

Method of preparation of Anulomana Aushadha using Hibiscuss sabdariffa 100g of fresh leaves of Hibiscus sabdariffa L. were cut into small pieces and cooked in 100ml of water.



# Method of preparation of *Rathkaralheba Kashaya*

30g of entire plant of *Cyathula prostrata* L. Blume (Family: Amaranthaceae; Sanskrit name: *Rakthapamarga*; Sinhala name: *Rathkaralheba*), 10g of tuber of *Cyperus rotundus* L. (Family: Cyperaceae; Sanskrit name: *Musta*; Sinhala name: *Kalanduru*) and 20g of roots of *Adhatoda vasica* L. (Family: Acanthaceae; Sanskrit name: *Vasa*; Sinhala name: *Adhatoda*), were mixed with 1920 ml of water (8 *Patha*) and reduced into 240 ml (1 *Patha*) by boiling.

#### Method of preparation of Roghan-e-Khas:

Ingredients and its quantities of *Roghan-e-Khas* are given in table 1. Heat the Sesame oil until it becomes frothless (*Nishphena*). Then

juices of leaves are mixed with oil. Heat the mixture until it reaches *Madyapaka Avastha*. Add Bee's wax to the mixture and stir it until completely melted. Filter the oil and mix with fine powder of *Girisindura* and *Laksha*. <sup>[6]</sup>

### Method of preparation of *Sarvavishadi* oil

*Sarvavishadi* oil prepared according to Ayurveda Pharmacopiea of Sri Lanka by Ayurveda Drug Cooperation was used in the present study.<sup>[7]</sup>

# Method of preparation of *Roghan-e-Khas Guda Varti*

10 ml of *Sarvavishadi* oil was mixed with 5g of *Roghan-e-Khas*. This mixture was applied on a piece of gauze 10 cm  $\times$  5 cm and rolled so as to prepare *Guda Varti*.

Table	1٠	Ingredients	of Ro	ohan_d	-Khas	with	their	quantities	
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Ingredients	Quantity
Leaves of Ricinus communis (Sanskrit name: Eranda)	100 g
Leaves of Calotropis gigantea (Sanskrit name: Arka)	100 g
Leaves of Datura metal (Sanskrit name: Datura)	100 g
Protective covering of insect Laccifer lacca (Sanskrit name: Laksha)	25 g
Bee's wax	75 g
Girisindura (Red Led is used)	75 g
Sesame oil	400 ml

#### Table 2: Reduction of clinical symptoms during treatment

Symptom	Before	After Anulomana		After entire treatment	
	treatment	Aushadha			
	Grade	Grade	% of relief	Grade	% of relief
Kandu (Itching)	2	2	0 %	0	100 %
Ruja (Pain)	3	3	0 %	0	100 %
Daha (Burning sensation)	3	3	0 %	0	100 %
Rectal fullness and lump at the anus	2	2	0 %	0	100 %
No of pile masses	3	3	0 %	2	33.33%
Rakta Srava (bleeding)	2	2	0 %	0	100 %



Phytoconstituent	Pharmacological properties	
Class	Туре	
Peptide	Eugenol	Analgesic <sup>[8]</sup>
Alkaloids Acid	Protocatechuic	Antibacterial <sup>[8]</sup>
Flavonoids Glucoside	Cyanidin - 3 -	Antioxidant <sup>[8]</sup>
Peptide Acid	Chlorogenic	Antioxidant <sup>[8]</sup>
Polysaccharides	Galactose, Mannose, Glucose	Immune enhancing <sup>[8]</sup>

#### Table 3: Proven phytoconstituents of Hibiscus sabdariffa L. (Ambulpala)

# Table 4: Ayurveda Pharmacodynamic properties of ingredients of Rathkaralheba Kashaya

Ingredients	Rasa	Guna	Veerya	Vipaka	Dosha Karma
Cyathula prostrata L. Blume <sup>[9]</sup>	Katu Thikta	Laghu Ruksha Theekshna	Ushna	Katu	Kapha Vata Shamaka Kapha Pitta Shamaka
Cyperus rotundus L. [10]	Katu Thikta Kashaya	Laghu Ruksha	Sheeta	Katu	Kapha Pitta Shamaka
Adhatoda vasica L.	Thikta Kashaya	Laghu Ruksha	Sheeta	Katu	Kapha Pitta Shamaka

#### Table 5: Ayurveda Pharmacodynamic properties of ingredients of Roghan-e-Khas

Ingredients	Rasa	Guna	Veerya	Vipaka	Dosha	Pradhana
					Karma	Karma
Ricinus	Madhura	Snigdha	Ushna	Madhura	Kapha Vata	Recana
communis L.	Katu				Shamaka,	
( <i>Erandu</i> ) <sup>[15]</sup>	Kashaya				Kapha	
					Pitta	
					Shamaka	
Calotropis	Katu	Laghu	Ushna	Katu	Kapha	Vatahara,
<i>gigantean</i> Linn	Thikta	Ruksha			Pitta	Vishaghna
(Vara) <sup>[16]</sup>	Kashaya				Shamaka	
Datura metel	Thikta	Laghu	Ushna	Katu	Kapha	Vishaghna
(Attana) <sup>[17]</sup>	Kashaya	Ruksha			Pitta	
					Shamaka	





**Fig-1: Before treatment** 

#### sResults:

Before treatment, pile masses were felt at 3 o'clock, 7 o' clock and 11 o'clock positions and slight bleeding was seen. None of the symptoms were reduced after *Anulomana*. On the 8<sup>th</sup> Day of the treatment bleeding reduced. After entire treatment (Day 15), pile masses located in 3'o clock position had disappeared. Pile masses at 7'o clock and 11'o clock positions were reduced in size but palpable. Burning sensation, itching, rectal fullness and bleeding were completely relieved. Reduction of symptoms are given in Table 2.

#### **Discussion:**

Effect of Hibiscus sabdariffa (Ambulpala): Ayurveda Pharmacodynamic properties such as Rasa, Guna, Veerya, Vipaka of Hibiscus sabdariffa were not found in authentic texts. Chakradatta describes the patients of Arshas should consume food and drinks daily which have the properties of Vatanulomana as well as Agnibala Vriddhikara.<sup>[4]</sup> According to Abat et al, (2017) Hibiscus sabdariffa is used as a mild laxative in India.<sup>[8]</sup> This plant is called Ambulpala in Sinhala language as it has a sour taste. Ingredients with sour taste promote Agni (digestive fire). Due to its Anulomana (laxative property) and Amla Rasa it is effective in treatment of Raktharshas. Table 3 shows some of scientifically proven phytoconstituents sabdariffa of *Hibiscus* (Ambulpala).



Fig-2: After treatment (Day 15)

#### Effect of Rathkaralheba Kashaya

Ayurveda Pharmacodynamic properties of ingredients of *Rathkaralheba Kashaya* are given in table 4. These ingredients contain *Thikta Rasa* and *Sheeta Veerya* properties and pacify vitiated *Pitta Dosha* and reduce *Daha* (burning sensation) and *Srava* (secretions). Due to its *Ushna Veerya* property, it pacifies vitiated *Vata* and *Kapha Dosha*. Therefore, it reduces Ruja (pain) and *Kandu* (itching). Hence, it pacifies vitiated *Dosha* in *Raktarshas* and beneficial in treatment of *Raktarshas*.

Anti-inflammatory, anti-oxidant, anti-bacterial and anti-ulcer properties of *Cyathula prostrata* L. Blume (*Rathkaralheba*), *Cyperus rotundus* (*Kaladuru*) and *Adhatoda vasica* (*Adhatoda*) are scientifically proven. Due to these properties *Rathkaralheba Kashaya* helps to decrease the symptoms in patient with *Raktaja Arshas* (bleeding haemorrhoids). <sup>[11-14]</sup>

# Effect of Roghan-e-Khas

Ayurveda Pharmacodynamic properties of ingredients of *Roghan-e-Khas* are given in table 5. These ingredients possess *Madhura Rasa*. Therefore, it pacifies vitiated *Vata* and *Pitta Dosha* and reduce *Daha* and *Ruja*. *Ushna Veerya* has *Sthambhana* property and help to reduce bleeding. Hence it is beneficial in treatment of *Raktarshas*.

Anti-inflammatory, anti- oxidant, anti bacterial, analgesic properties of *Ricinus communi*, *Calotropis gigantean* and *Datura* 



*metel* are scientifically proven. Due to these properties *Roghan-e-Khas* helps to decrease the symptoms in patient with *Raktaja Arshas* (bleeding haemorrhoids). <sup>[18-21]</sup>

# Effect of Sarvavishadi oil

Most of these ingredients of Sarvavishadi oil possess Ushna Veerya has Sthambhana property and help to reduce bleeding and pacify vitiated Vata and Kapha Dosha. Therefore, it reduces Ruja and Kandu. Katu, Thikta and Kashaya Rasa pacify vitiated Pitta Dosha and reduce Daha and Srava and beneficial in treatment of Raktarshas.<sup>[22]</sup> Ingredients of Sarvavishadi oil is a described Ayurveda possess anti-inflammatory, in analgesic, antibacterial and antifungal properties. [23] Therefore, Sarvavishadi oil helps to decrease the symptoms in patient with Raktaja Arshas (bleeding haemorrhoids)

#### **Conclusion:**

It is concluded that *Anulomana* using *Hibiscus* sabdariffa L. followed by *Rathkaralheba Kashaya* and *Roghan-e-Khas Guda Varti* is effective in treatment of *Raktarshas* (Haemorrhoids).

# Limitation of study:

As this is a single case report, it is suggested that the study should be tried with a larger samples for scientific validation.

# Written Informed Consent:

The patient's written consent was obtained for publication of the data before commencement of research.

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