



A CRITICAL UNDERSTANDING OF THE ROLE OF RASABHAISHAJYA YOGA IN TACKLING NCDs W. S. R TO HRIDROGA

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ABSTRACT

INTRODUCTION: Non-communicable diseases (NCDs) are a major threat to the community. It has been noted that cardiovascular diseases account for the majority of NCD deaths, making it a major medical concern. *Ayurveda* plays an important role in tackling such diseases. **MATERIALS AND METHODS:** *Srotoshodhana* and *Ag-nivardhana* are prime factors to be looked upon to treat the disease along with the strengthening of *Srotas*. Various *Rasa-Bhaishajyagranthas* explain the details of *Hridroga Chikitsa* in both of these aspects. **DISCUSSION:** Every drug has its role to play in the management of a disease and reversal of disease pathology is thereby achieved where the *Rasapancaaka* of a *Dravya* plays a prime role along with the mode of administration and specific *Aushadhasevanakala*, *Aushadhasevanamatra*, and *Anupana*. **RESULT:** Herbo-mineral drugs help in maintaining Cardiac activity. Hence an attempt has been made to throw light upon the therapeutic aspects of various medicinal preparations in the management of Noncommunicable diseases with special reference to *Hridroga*.

Keywords: Non-communicable diseases, Cardio-vascular diseases, Hridroga, Rasa-Bhaishajya Yogas, Rasa-Bhaishajyagranthas, Srotoshodhana, VyadhiShamaka, Rasayana.

INTRODUCTION

Non-communicable diseases (NCD) are a predominant ailment disturbing community health and play a significant role in mortality rate, according to surveys. Among these, cardiovascular diseases account for the majority of NCD deaths, making it a major medical concern. In the recent past, the risk of Cardio-vascular diseases has increased four-fold. As per the statistics of WHO (World Health Organization), an estimated 17.9 million people died from CVDs in 2019, representing 32% of all global deaths. Of these deaths, 85% were due to heart attack and stroke. Over three-quarters of CVD deaths take place in low- and middle-income countries.

Out of the 17 million premature deaths (under the age of 70) due to non-communicable diseases in 2019, 38% were caused by CVDs. *Ayurveda* explains *Hridaya* as one of the important *MarmaSthana- Sira Marma* [1] responsible for the circulation of *Rasa-Raktadi Dhatu*. The metabolism and systemic functions thus depend on the proper functioning of *Hridaya*. The present era has been witnessing various cardiac pathologies which threaten the physical as well as psychological status of the community. Hence the concept of *Hridaya* and *Hridroga*, its understanding is the need of the hour.

AIMS AND OBJECTIVES:

AIM- To highlight the *Rasa-BhaishajyaYogas* specified for *Hridroga* and its critical analysis.

OBJECTIVES-

- To list out the *Rasa-BhaishajyaYogas* mentioned in our classical books mainly *BhaishajyaRatnavali*.

- To critically analyze the ingredients and their effect in *Sampraptivighattan*.

MATERIALS AND METHODS:

Classical books pertaining to *Rasashastra* and *Bhaishajya Kalpana* were referred to; details of the *Vyadhi- Hridroga, Nidanapanchaka, and Chikitsa* were reviewed, interpreted, and analyzed. *Chikitsa* and *Rasa-BhaishajyaYogas* were mainly compiled from the text *BhaishajyaRatnavali*.

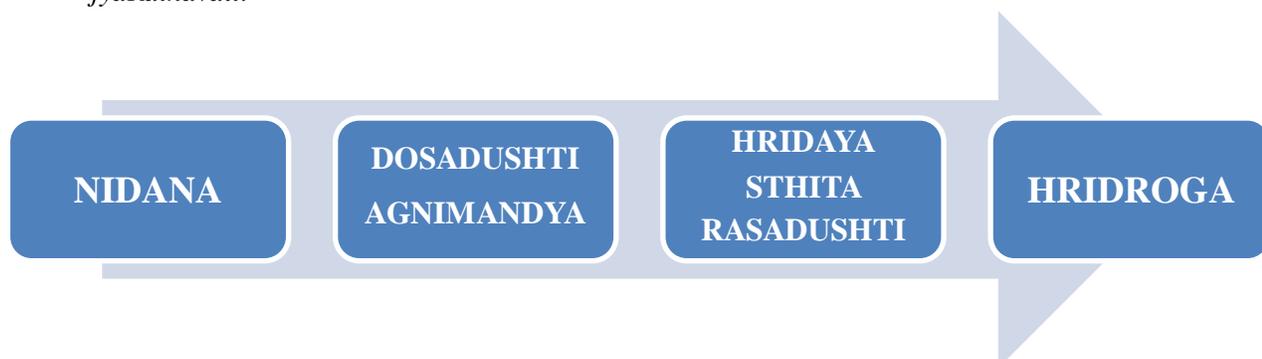
CONCEPT OF HRIDAYA:

Hridaya is *Shonita-kaphaprasadaja (Sarabhaga/ Essence of Rakta and Kapha)* [2]. *Hridaya* is the *Adhishtana* for *Pranavayu, Vyanavayu, Sadhakapitta, Avalambakakapha, Rasa, Rakta, Mamsa, Para Ojasand Moola ofPranavahaSrotas, RasavahaSrotas*. [3]

Compared to the Modern concept of the heart, Heart tissue/ Myocardium is *MamsaDhatu*, and the rhythmic contractions are due to *Vata Karma*.

CONCEPT OF HRIDROGA:

Agnimandya and *Srotodushti* are the main root cause of any *Vyadhi*. Due to *AhitakaraAhara- Vihara*, the *Dosadushti* occurs leading to *Agnimandya*. These are the leading causes of *HridayasthitaRasadushti*. Further vitiation and alterations in the normal physiology and anatomy of *Hridaya* occur leading to *Hritshoola*. Various pathologies thus resulting are collective group as the *Vyadhi Hridroga* (can be considered under the heading cardiovascular diseases). [4]



In the case of *Tridoshaja Hridroga*, if one consumes *Tila, Ksheera, and Guda* it leads to *Granthi* in *Hri*

daya, and Kledana(Adherence of Granthi in Hri-
daya) occurs in leading to Krimijanana.^[5]

SAMANYA HRIDROGA LAKSHANA ^[6]

Vaivaranya(Discoloration), **Moorcha**(Fainting),
Jwara(Fever), **Kasa**(Cough), **Hikka**(Hiccups),

Shwasa(Dyspnea), **Asyavairasya**(Bad taste in
mouth), **Trishna**(Thirst), **Pramoha**(Stupor),
Chhardi(Vomiting), **Kaphotklesha**(Nausea), **Ruja**(
Pain), **Aruchi**(Anorexia)

Table 01-List of Lakshana (Symptoms) of Hridroga as per Charaka Samhita ^[6][7], Sushruta Samhita ^[8], AstangaHridaya ^[9]

VATAJA HRIDROGA	PITTAJA HRIDROGA
Hridshoonyata (Sensation of Void in the cardiac region)	Hriddaha (Heartburn)
Vepathu (Tremors)	VaktreTiktata (Bitter taste in mouth)
Veshtana (Cardiac cramps)	Tikta-Amla Udgirana (Bitter-Sour belching/Eructation)
Stambha (Stiffness)	Klama (Exhaustion)
Pramoha (Stupor)	Trishna (Excessive Thirst)
Darah (Tachycardia)	Moorcha (Fainting)
Uttamaruja(Teevvaruja) (Severe pain in the cardiac region)	Bhrama (Giddiness)
Jeerneatyarth Vedana (Post-prandial pain)	Sweda (Excessive perspiration)
Bhavadravashosha-Shushyate (Sense of dryness/ emptiness)	Moha (Stupor)
Bheda-Bhidyate (Cutting pain)	Santrasa (Fear)
Ayamyate (Drawing pain)	Tapa (Burning sensation)
Tudyate (Crushing pain)	Jwara (Fever/Increased body temperature)
Nirmathyate (Piercing pain)	Peetabhava (Icterus)
Deeryate (Creaking pain)	Chosha (Sucking pain)
Sphotyate (Pricking pain)	HridayaKlama (Heaviness and Exhaustion)
Patyate (Splitting pain)	Dhumayana (Feeling as if chest is filled with fumes)
ShulyateAtyartham (Severe pain)	Mukhashosha (Dryness of mouth)
Akasmadeenata (Sudden sense of depression)	Amla Pittasya Chhardanam (Sour Vomiting)
Shoka (Grief)	
Bhaya (Fear)	
Shabdaasahishnuta (Intolerance to sound)	
Shvasarodha (Dyspnea)	
Alpanidrata (Decreased sleep)	

Table 02-List of Lakshana (Symptoms) of Hridroga ^[6] ^[7] ^[8] ^[9]

KAPHAJA HRIDROGA	SANNIPATAJA HRIDROGA
Hridayasuptata (Cardiac Dullness)	Utklesha-Hrillasa (Nausea)
Hridayastimita (Stiffness in the Cardiac region)	Steevana (Spitting)
HridayaBharikata/Guruta (Stiffness in Chest)	Toda (Crushing pain)
Tandra (Stupor)	Shoola (Pain)
Aruchi (Anorexia)	Aruchi (Anorexia)
HridayaAshmavrita (Feeling as if the stone is present in Cardiac region)	Shyavanetratwa (Pale eyes)
Hridayastabdhata	Shosha (Emaciation)
	KRIMIJA HRIDROGA

(Heart block) Kaphapraseka (Expectoration) Jwara (Fever) Kasa (Cough) Agnimardava (Loss of Appetite) Asyamadhuryata (Sweet taste in the mouth) Steevana Nidra (Excessive sleep) Alasaya (Laziness)	Teevraarti/ Maharuja (Excruciating pain) Toda- Soochibhiriva/ ChidramanaShoola (Pricking type of pain) Kandu (Itching) Utklesha-Hrillasa (Nausea) Steevana (Spitting) Toda (Crushing pain) Shoola (Pain) Aruchi (Anorexia) Shyavanetratwa (Pale eyes) Shosha (Emaciation) Tamapravesha (Syncope) Kaphasruti (Expectoration) (Few authors consider <i>Krimija Hridroga</i> as a complication of <i>Sannipataja Hridroga</i>)
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Table 03 – Probable comparison of Ayurveda concept of Lakshana-Symptomatology to Modern diseases

VATAJA HRIDROGA	PITTAJA HRIDROGA	KAPHAJA HRIDROGA	KRIMIJAHRIDROGA
Arteriosclerosis/ Arteriosclerotic diseases Unstable Angina pectoris Hypertension Congestive Heart failure Ischemic Heart Disease	Gastritis Infective Endocarditis-Pericarditis Pericardial effusion or all inflammatory disorders of the heart.	Atherosclerosis Cardiac block Angina or Myocardial Infarction	Valvular Bacterial Endocarditis Thrombo-embolic event of a coronary artery leading to acute M.I. CHAGAS disease caused by <i>Trypanosoma cruzi</i> protozoa

HRIDROGA CIKITSA:

Srotoshodhana and *Agnivardhana* are prime factors to be looked upon in order to treat the disease along with strengthening of *Srotas*.
In this regard, *Rasa-Bhaishajya Yogas* act as *Vyadhi-shamaka* as well as *Rasayana*.

Formulations have been mentioned in our classics based on ingredients (herbal/ mineral), method of preparation, and utility of *Yoga*.

CIKITSASOOTRA OF HRIDROGA: [10]

Treatments of Cardiac disorders are stated depending on the *Dosha- Dhatu* involved.

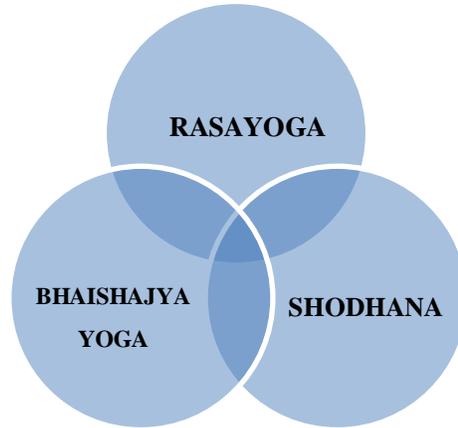
Table 04- Cikitsa Sootra of Different types of Hridroga

VATAJA HRIDROGA	PITTAJA HRIDROGA	KAPHAJA HRIDROGA	KRIMIJAHRIDROGA
<i>Taila- Ghrita Prayoga, Vataghna Kriya</i>	<i>Sheeta Pradeha, Parisechana, Virechana, Sarpi Prayoga</i>	<i>Swedana, Vamana, Langhana, Kaphaghna Kriya</i>	<i>Krimighna Vidhi</i>

RESULTS: [11]

Classification of formulations based on purpose can be understood as *Shamana* and *Shodhana*.

- *Shodhana/Pancakarma* includes *Vamana, Pradeha, Virecana, and Parisechana*.
- *Shamana* includes *Rasa-Bhaishajya Yoga*.



SHODHANA:

Shodhana though contradicted in delicate conditions such as Hridroga, can be carried with the necessary care and utmost precaution.

Bhaishajya Ratnavali quotes following Shodhana Karma to be carried out in respective Hridroga

a) VATAJA HRIDROGA –

Vamana with Dwipanchamoola Kwatha with Sneha and Saindhava Lavana

b) PITTAJA HRIDROGA –

Vamana with Shreeparni - Madhukasiddha Kwatha with Kshoudra Sita, Guda

Virechana with Draksha-Parushakasiddha Kwatha with Sita, Kshoudra or Yasti-Tiktarohinisiddha Sitaajala

Snehapana- Madhuraganasiddha Ghrita, Pittajajwaraghna Dravyasiddha Ghrita

Pradeha and Parisecana with Sheetala Dravya such as Shwetachandana, Karpoora and Kamala over Hridayapradesha (Applied over the Cardiac region as a Lepa)

KAPHAJA HRIDROGA-

Vamana with Vacha-Nimba Kwatha followed by Pippalyadi Choorna intake.

c) TRIDOSHAJA HRIDROGA-

Langhana is the first line of treatment.

d) KRIMIJA HRIDROGA-

Virechana with Sugandhi Gana Dravya (Ela, Twak, Patra, Nagakesara) Saindhava Lavana, Ajaji, Sharkara, Vidanga Choorna, Dhanyamla

SHAMANA:

a) Classical books state the formulations based on the types of Hridroga- Vataja, Pittaja, Kaphaja, Tridoshaja, and Krimi ja

Table 05 – List of formulations based on the types of Hridroga [11]

<p>VATAJA HRIDROGA Pippalyadi Choorna Haritakyadi Choorna Pushkaramooladi Kalka Shunthi Kvatha Pushkaradi Kvatha</p>	<p>PITTAJA HRIDROGA Madhuraganasiddha Ghrita- Kashaya Arjunadi Siddha Ksheera Arjunatvak Choorna</p>
<p>KAPHAJA HRIDROGA Sookshma Eladi Choorna Trivrutadi Choorna</p>	<p>KRIMIJA HRIDROGA Vidangadi Choorna</p>

b) The formulations have been segregated under each type according to the form such as Choorna, Kvatha, Ksheera, Leha, Paka, Arishta, Ghrita Kalpana, and Rasayoga.

Table 06- List of Bhaishajya Yogas^[11]

<p>CHOORNA <i>PushkaramoolaChoorna</i> <i>Nagabala-Arjuna Choorna</i> <i>HingvadiChoorna</i> <i>KakubhadiChoorna</i> <i>PathadyaChoorna</i></p>	<p>KVATHA <i>DashamoolaKvatha</i></p>	<p>LEHA/PAKA <i>GodhoomarjunaPaka</i> <i>GodhoomarjunaLeha</i></p>
<p>ARISHTA <i>Parthadyarishta</i></p>	<p>GHRITA <i>VallabhaGhrita</i> <i>SvadamstradiGhrita</i> <i>Baladi Ghrita</i> <i>Arjuna Ghrta</i></p>	

Table 07- List of Rasayogas^[11]

<p>RASAYOGAS <i>Trinetra Rasa</i> <i>Chintamani Rasa</i> <i>MrigashringaBhasma</i> <i>Vishveshvara Rasa</i> <i>Nagarjunabhra Rasa</i> <i>ShankaraVati</i> <i>Hridayarnava Rasa</i> <i>Kalyanasundara Rasa</i> <i>Panchanana Rasa</i> <i>Ratnakara Rasa</i> <i>PrabhakaraVati</i></p>
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DISCUSSION

❖ Role of Arjuna in HridrogaCikitsa

- ✓ The chemical constituents of *Arjuna* namely Arjunin, Arjunolic acid, Calcium, and Copper have a contributory effect on cardiac hemodynamic, coronary flow, and blood pressure regulation.
- ✓ *Arjuna* is well known for its Antioxidant, Cardio protective activity, and Prostaglandin E2-like activity with respect to coronary vasodilation and hypotension.
- ✓ Studies have proven that *Arjuna* also improves LVEF(Left Ventricular Ejection Fraction)
- ✓ Its hypolipidemic property proves beneficial in conditions like Atherosclerosis.
- ✓ Its Antiatherogenic property helps in tackling the atherosclerotic as well as arterial causes of cardiovascular diseases.

❖ Role of Kashtoushadhain Vyadhishamana

- ✓ Most of the herbal drugs used possess *Ushna-veerya*, *Madhuravipaka*, *Kaphavatashamaka Guna*
- ✓ *Anulomana*, *Bhedana Guna* helps in *Amapachana*, *Srotoshodhana*, and *Anulomana* of *Vata* thus treating *Pratilomagata Vayu* and clearing the *Srotas*.
- ✓ The main *Karmukata* of the *Kashtoushadhaare Pachana*, *Deepana*. *Hridya*, *Rasayana*, *Krimihara Guna*
- ✓ *Rasayana Guna* helps in enhancing the drug's utility as a Cardio protective element.
- ❖ **Role of Shuddha Parada- ShuddhaGandhaka / Kajjali in HridrogaCikitsa**
- ✓ *Kajjali* is known for its *Yogavahi*, *Sarvarogahara Guna* targets the *Vatadushti* as well as strengthening of Cardiac muscles and smooth functioning owing to its *Rasayana Guna*
- ✓ It also helps in *Agnideepana* and *Amapachana*

❖ **Role of ShuddhaAbhrakaBhasma in HridrogaCikitsa**

✓ Abhraka is well known as a *Rasayana* along with *Deepana- Pachana*.

✓ Studies have proven its effect on Bradycardia and Cardiac oedema.

❖ **Role of ShuddhaDhatu Bhasma(Tamradi)**

✓ *TamraBhasma* helps in the regulation of blood cholesterol owing to its *Lekhana Guna- Antihyperlipidemic* action.

✓ *Dhatu VargaDravyas* are excellent *Rasayana, Balya*; possess *Lekhana- Karshana Guna*

✓ *Dhatu VargaDravyas* mainly aims at improving the anatomy and physiology of *Dhatu*s at the cell-tissue level.

❖ **Role of SudhavargaDravya**

✓ Rich in Calcium these drugs help in regulating the activity of the Renin-Angiotensin system

✓ Improves and maintains Sodium- Potassium balance.

✓ Decreases Vascular Smooth muscle tone thereby regulating Blood pressure.

✓ Calcium molecules react with Fatty acids and bile in the intestine and form Insoluble soaps. These decrease fatty acid absorption thereby lowering blood cholesterol.

❖ **Role of ShuddhaShilajatu**

✓ *Shilajatu* is *Lekhaka, Medochedhaka* which helps in Atherosclerotic conditions.

✓ Its *Balya, Rasayana Guna* can target Vascular derangements thus strengthening the Vascular system.

✓ *Yogavahi Guna* helps in targeting specific actions.

❖ **Role of AmlavargaDravya**

✓ As *Amlarasa* is *Agni* and *PrithwiMahabhoota* predominant and *Agneya, Snigdha, Laghu,*

Ushnaveeryatmaka, it acts as *Agnideepaka* and *Anulomaka* which clarifies the channels in turn improving the absorptive capacity of cells.

✓ Vitamin C content in *AmlavargaDravyas* a potent Antioxidant.

❖ **Rasa-BhaishajyaYogas**

✓ The *Yogas* mentioned in our classics are specific to the cause and symptoms of the disease.

✓ It acts both as *Vyadhishamaka* by reversal of disease via *Sampraptivighatana* and *Rasayana* by imparting health and strength to the tissues.

✓ *Rasayogas* by the virtue of their *Alpamatra, Sookshma Guna* ^[12] penetrates deeper tissues suggesting its efficacy in target-specific action.

✓ The *BhaishajyaYogas* may be understood in another dimension as well:

➤ **Churna and Kwath** placed first in the order might suggest their role as *Deepana, Pachana, and Srotoshodhana*.

➤ **Ghrita Kalpana** may suggest its *Agnideepana* and *Rasayana Guna*.

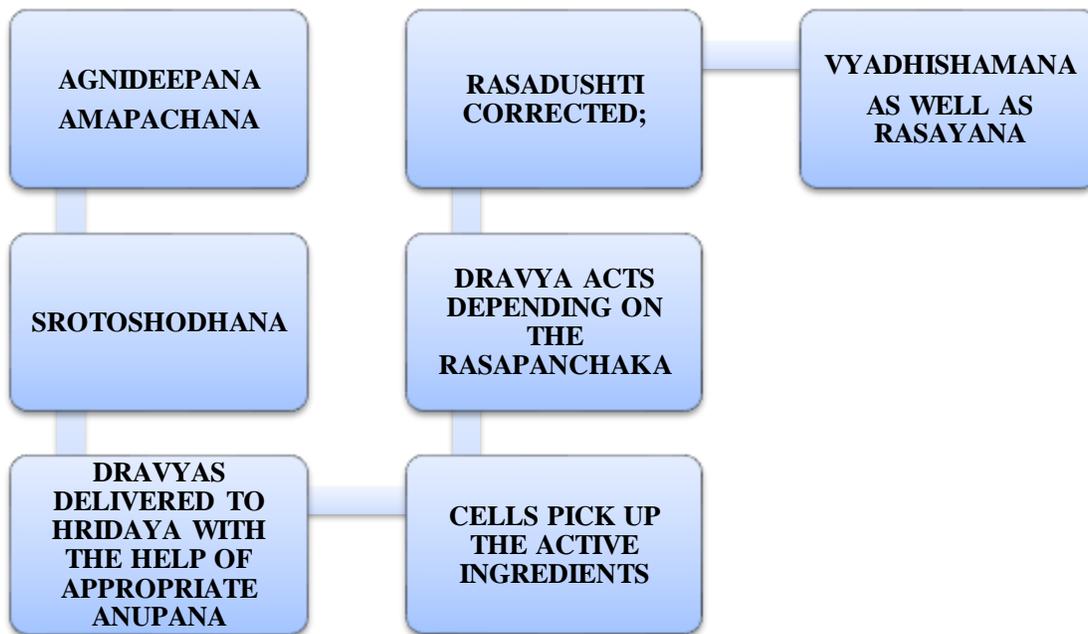
➤ **Leha/ Pakam** might have been explained later symbolizing its administration after *Srotoshodhana* and *Deepana* suggesting the efficient absorption of active principles after clarification of channels/ activation of cells.

➤ **Arishta** might act as a Cardio tonic.

✓ Thus *Agnideepana, Amapachana, and Srotoshodhana* play a major role in *Vyadhiharana* and *Rasayana* action as they help in increasing the bio availability of a drug, facilitate ADME(Absorption, Distribution, Metabolism, and Excretion of a drug) and improves the effectiveness of a drug.

✓ Administration of a drug is also important to achieve expected results. This is possible when the *Aushadhaprayogavidhi* namely *Sevanakala, Matra, and Anupana* is followed.

Role of the Dravyas in Samprativighatana



CONCLUSION

Every drug has its role to play in the management of disease and reversal of disease pathology.

Rasapanchaka of a *Dravya* plays a prime role. Herbo-mineral drugs help in maintaining Cardiac activity by maintaining the physiology and anatomy of the heart. The properties of *Rasadravayas* are enhanced by herbal drugs and vice versa. *Rasa-Bhaisajya Yogas* thus prove to be an excellent tool not only in tackling diseases but also in improving the overall health of an individual thereby improving community health. All these details, henceforth suggest that *Ayurveda* has a potential solution for tackling such grave Non-communicable diseases (NCDs) and proves to be an efficient healthcare system.

REFERENCES

1. Acharya TrikamjiJadavji, editor, Sushrutasamhita of Sushruta, Shareerasthana;PratyekaMarmanirdeshaShareera: Chapter 6, Verse 7.Varanasi: ChaukambaKrishnadas Academy, 2014; Pg No 370.
2. Acharya TrikamjiJadavji, editor, Sushrutasamhita of Sushruta, Shareerasthana;GarbhvyakaranShareera: Chapter 4, Verse 31.Varanasi: ChaukambaKrishnadas Academy, 2014; Pg No 358.
3. Acharya TrikamjiJadavji, editor, Sushrutasamhita of Sushruta, Shareerasthana;DhamanivyakaranaShareera: Chapter 9, Verse 12.Varanasi: ChaukambaKrishnadas Academy, 2014; Pg No 386.
4. Acharya TrikamjiJadavji, editor, Sushrutasamhita of Sushruta, Uttarantra; Hridrogapratishedha:Chapter 43, Verse 4 . Varanasi: ChaukambaKrishnadas Academy, 2014; Pg No 727.
5. Acharya TrikamjiJadavji, editor,Chakrapanidatta, Charakasamhita of Agnivesha, Sootrasthana; Kiyanthashiraseeyadyaya: Chapter 17, Verse 36-8. Varanasi: Chaukamba Orientalia, 2011; Pg No 100.
6. Acharya TrikamjiJadavji, editor,Chakrapanidatta, Charakasamhita of Agnivesha, Chikitsasthana; Trimarmeeeyachikitsitamadhyaya: Chapter 26, Verse 79-80. Varanasi: Chaukamba Orientalia, 2011; Pg No 602.
7. Acharya TrikamjiJadavji, editor,Chakrapanidatta, Charakasamhita of Agnivesha, Sootrasthana; Kiyanthashiraseeyadyaya: Chapter 17, Verse 30-40. Varanasi: Chaukamba Orientalia, 2011; Pg No 100.
8. Acharya TrikamjiJadavji, editor, Sushrutasamhita of Sushruta, Uttarantra;Hridrogapratishedha: Chapter

- 43, Verse 6-9. Varanasi: ChaukambaKrishnadas Academy, 2014; Pg No 727.
9. Paradakara Vaidya Harishastri, editor, AstangaHridaya of Vagbhata, Nidanasthana; RajayakshmaNidana: Chapter 5, Verse 39-44. Varanasi: Chaukamba Orientalia, 2011; Pg No 482-3.
10. Acharya TrikamjiJadavji, editor, Chakrapanidatta, Charakasamhita of Agnivesha, Chikitsasthana; Trimarmeeeyachikitsitamadhyaya: Chapter 26, Verse 81-103. Varanasi: Chaukamba Orientalia, 2011; Pg No 602-4.
11. Mishra Siddhinandan, editor, BhaishajyaRatnavali of KavirajGovindadassen, Hridrogadhikara: Chapter 33, Verse 1-75. Varanasi: Chaukambha Orientalia, Revised edition 2015; Pg No 666-673.
12. Mishra Siddhinandan, editor, RasaratnaSamucchaya of Vagbhata, Lohakalpa: Chapter 28, Verse 1. Varanasi: Chaukambha Orientalia, 2019; Pg No 633.

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