

CONCEPTUAL STUDY OF KAMALA

Dr. Azara Qureshi^{*1}, Dr. Monika Rasotra², Dr. Riyanka Kumari³ and Dr. Vivek Lohan⁴^{1,2,3} Assistant Professor, Babe Ke Ayurvedic Medical College and Hospital, Daudhar, Moga, Punjab.⁴P.G. Scholar, Department of Kayachikitsa, R. G. G. PG. Ayurvedic College and Hospital, Paprola, H.P.***Corresponding Author: Dr. Azara Qureshi**

Assistant Professor, Babe Ke Ayurvedic Medical College and Hospital, Daudhar, Moga, Punjab.

Article Received on 04/12/2021

Article Revised on 24/12/2021

Article Accepted on 14/01/2022

ABSTRACT

Ayurveda is a traditional medical science. In our *Samhita*, *Kamala Vyadhi* is briefly described. *Kamala* is a *Pittaj Nantmaja* as well as *Raktapradoshaja Vyadhi*. *Kamala* is also considered as a purely *Paittik Roga* caused by *Rakta Dushti* due to vitiated *Pitta* and vice-versa. In *Charak Samhita*, *Kamala* has been considered as an advance stage of *Pandu*, whereas in *Susruta Samhita* it has been considered as a complication of *Pandu Roga* as well as an independent disease entity. On the basis of similarity in clinical symptomatology, it can be correlated with jaundice in modern medical science. Modern science has limitations in treating *Kamala Vyadhi* (jaundice) but *Ayurvedic* literature clearly explained pathology and treatment of *Kamala Vyadhi* which shows the specificity of *Ayurveda*.

Aim and Objective: To review the *Nidanpanchak*, *Ayurvedic* management of *Kamala Vyadhi*. To review the *Pathyapathya* mentioned in *Kamala Vyadhi*. **Methodology:** Text will be collected from *Ayurvedic Samhitas*, different websites and journals will be referred. **Result:** *Shodhana* and *Shamana Chikitsa* are effective in the management of *Kamala*. **Discussion:** In *Ayurveda Nidana Parivarjana Shamana*, *Shodhana* are the way to treat any disease hence in *Kamala* we should really examine causative factors and then give *Shamana* and *Shodhana Chikitsa*.

KEYWORDS: *Kamala*, *Shakhashrita Kamala*, *Kosthashrita Kamala*, *Shodhana* and *Shamana Chikitsa*.

INTRODUCTION

Ayurveda is a science of traditional medicine and art of living a healthy life. It describes the basic and applied aspect of life process, health and disease. *Bhrihatrayee* are three main *Samhitas* which explain the basic principles of *Ayurveda*. They are *Charak Samhita*, *Susruta Samhita* and *Vagbhat Samhita* (*Ashtang Hriday/Ashtang Sangrah*). In our ancient *Samhitas*, *Kamala* is briefly described. In *Charak Samhita*,^[1] *Kamala* has been considered as an advance stage of *Pandu*. In *Susruta Samhita*,^[2] it has been considered as a complication of *Pandu Roga* as well as an independent disease entity whereas; *Acharya Vagbhat* has described *Kamala* as a separate disease entity,^[3] *Kamala* is considered as a purely *Paittik Roga* caused by *Rakta Dushti* due to vitiated *Pitta* and vice-versa.^[4] *Acharya Chakrapani* has used the term *Bahupitta Kamala* as the synonyms of *Koshthashkhashrita Kamala* and *Alpapitta Kamala* as the synonyms of *Shakhashrita Kamala*. On the basis of clinical symptomatology, *Kamala* can be correlated with jaundice.

MATERIALS AND METHODS

- *Charak Samhita* with *Ayurveda Dipika* Commentary by *Chakrapani*.

- *Susruta Samhita* with *Nibandhsangraha* commentary of *Shri Dalhanacharya* and *Nyayachandrika Panjika* of *Shri Gayadasacharya*.
- *Ashtang Hriday* with commentaries *Sarvangasundara* of *Arundatta* and *Ayurveda Rasayana* of *Hemadri*.
- Relevant articles published in various national and international journals.
- *Harrison's* principles of internal medicines.

Nirukti of Kamala

1. कामं कान्ति लूनति हन्ति इति कामला^[5]
2. कामला त्रि कम् कलच । वसन्त काले पु. कस्य जलस्याम्लो असम्बन्धो यत्र^[6]

Classification

- *Charak*^[7] - *Koshthashkhashrit*, *Shakhashrit*, *Halimak*, *Kumbhkamala*.
- *Susruta*^[8] - *Kamala*, *Halimak*, *Kumbhahvaya* (*Kumbha Sahva*), *Laghraka* (*Laghrakaalasaka*).
- *Vagbhat*^[9] - *Swatantra*, *Paratantra*, *Kumbhakamala*, *Lodhara*, *Aalasaka*.

Nidana

Acharya Charaka has mentioned Kamala as a sequel of Pandu Roga that means when Pandu Rogi takes Pitta aggravating Nidanas, the Pitta further vitiates Rakta and Mamsa, thus produces the disease Kamala.^[10] While Acharya Susruta and Acharya Vagbhata quoted that Kamala may occur without the Pandu Roga.

Category wise Nidana of Kamala Roga^[11,12]

Aharaja Nidana: Kshara, Amla, Lavana, Ati Ushna, Viruddha, Asatmya Bhojan, Nishpava, Masha, Pinyaka, Till Taila, Dadhi, Kulattha, Sarshapa, Langli.

Viharaja Nidana: Diwaswapna, Ati Vyayam, Ati Maithuna, Pratikarma, Vaishamya, Vega Dharana.

Ritujanya Nidana: Sarad Ritu, Greeshma Ritu, Varsha Ritu, Meghanta, Ardharatri, Madhyanha.

Pradhana Nidana Guna: Ruksha, Sheeta, Guru, Swadu.

Mansik Nidana: Kama, Chinta, Shoka, Bhaya, Krodha.

SAMPRAPTI

Koshthashkhashrita Kamala: Pandurogi Pittakara Aahara Vihara Sevan-Increased Ushna, Tikshna Guna,

ROOPA**Table 1: Roopa of Kosthashrita Kamala.^[14-19]**

Lakshana	Ch.S.	Su.S	K.S.	A.S.	A.H.	M.Ni.
Haridra Netra	+	-	-	+	+	+
Haridra Twaka	+	-	-	+	+	+
Haridra Nakha	+	-	-	-	-	+
Rakta Peeta Mutra	+	-	-	-	-	+
Peeta Mutra	-	-	+	-	-	-
Haridra Mutra	+	-	-	+	+	-
Rakta Peeta Sakrita	+	-	-	-	-	+
Peeta Nakha	-	-	+	-	-	-
Peeta Mukha	-	-	+	-	-	-
Haridra Vakrata	-	-	-	+	+	-
Bhekavarnata	+	-	-	+	+	+
Hatendriyam	+	-	-	-	-	+
Daha	+	-	-	+	+	+
Avipaka	+	-	-	+	+	+
Daurbalyam	+	-	-	+	+	+
Sadana	+	-	-	-	-	+
Aruchi	+	-	-	-	-	+
Ati Panduravarna	-	+	-	-	-	-
Tandra	-	+	-	-	-	-
Bala Kshaya	-	+	-	-	-	-
Nirutsaha	-	-	+	-	-	-
Rudir Nasha	-	-	+	-	-	-
Peeta Netrata	-	-	+	-	-	-
Agninasha	-	-	+	-	-	-
Haridra Sakrita	-	-	+	+	+	-
Trishna	-	-	-	+	+	-

Susruta quotes – Arati, Tandra, Balakshaya, along with features of Pandu as symptoms of Kamala.

Dushta Aahara Rasa-Pachak Pitta Dushti and Rasa Dushthi-Agnimandya-Rakta and Mamsa Vidaha - Yakrutaagamana- Kosthashrita Kamala.

Shakhshrita Kamala: Hetu– Vata and Kapha Prakopa – Rukshaguna Pradhan Vata Dosha gets Kaphamurchita - Obstruction of Pitta Nalika- Vimargagamana of Pitta all over –Haridra Twacha, Netra, Mootra- Shakhshrita Kamala

PURVA ROOPA

Specific prodromal symptoms have not been mentioned in Ayurvedic classics. But in Sushruta Samhita premonitory symptoms are given below.^[13]

- Twak Sphotanam (cracking of the skin)
- Sthivanam (salivation)
- Gatrasada (lassitude)
- Mridbhakshana (desire for eating clay)
- Kuta Shotha (swelling of the eyelids)
- Vinmutra Peetatwa (yellow colour of the stool and urine)
- Avipaka (indigestion)

Kumbha Kamala Lakshana

In Charaka Samhita it has been mentioned that, if the Kamala is not treated properly, it becomes deep seated and thus becomes difficult to cure. This condition is called Kumbha Kamala. Sotha and Parvabheda along

with the feature of *Kamala* as the characteristic of *Kumbha Kamala* has been described in *Sushruta Samhita* and *Astanga Hridaya*.^[20,21]

Table 2: Lakshana of Kumbha Kamala.^[22-26]

<i>JLakshana</i>	<i>Ch.S.</i>	<i>Su. S.</i>	<i>A.S.</i>	<i>A.H.</i>	<i>M.N.</i>	<i>B.P.</i>	<i>A. Ni.</i>
<i>Kharibhuta</i>	+	-	-	-	+	+	-
<i>Mahasopha</i>	-	+	+	+	-	-	-
<i>Parvabheda</i>	-	+	-	-	-	-	-
<i>Krishapeeta Twaktavam</i>	-	-	-	-	-	-	+
<i>Krishapeeta Mutra</i>	-	-	-	-	-	-	+
<i>Krishapeeta Shakrit</i>	-	-	-	-	-	-	+
<i>Krishapeeta Netra</i>	-	-	-	-	-	-	+

Halimaka: When a patient of *Kamala* develops green, black or yellow discoloration (of skin), *Kshaya* of *Bala*, *Tandra*, *Mandagni*, *Mridujwar*, *Daha*, *Angmarda*, *Trishna*, *Aruchi* and *Bhrama*, he/she should be known to be suffering from *Halimaka* disease which is due to *Vata* and *Pitta Dosh*.^[27-29]

Panaki: *Santapa*, *Bhinnavarchas*, *Bahirantascha Pitta* and *Panduta* are the clinical features of *Panaki* disease.^[30]

Sadhyasadyatwa

Initial stages of *Kamala* are *Sadhya*. On long standing it becomes *Kricchasadhya*. If *Kamala* presents with further symptoms like *Krushna-Pita Shakruta Mutra*, *Raktamutra*, *Shohta*, *Chardi*, *Daha*, *Aruchi*, *Trushna*, *Anaha*, *Moha*, *Nasht Agni* is considered as *Asadhya*. *Kumbha Kamala* with *Chardi*, *Aruchi*, *Hrullas*, *Jwara*, *Klama*, *Swasa*, *Kasa*, *Atisara* considered as *Asadhya*.^[31,32]

Kamala Chikitsa

Principle of management of *Kamala* can be broadly classified as:

- *Sanshodhana Chikitsa*
- *Snehana*
- *Virechana*
- *Sanshamana Chikitsa- Kapha Pittahara Chikitsa*

Snehana is indicated as *Poorva Karma* for *Virechana* in *Kamala*. The *Sneha* which is advised internally stimulate gall bladder to release more bile into duodenum to digest the fat. Therefore, bilirubin which is stored in gall bladder is excreted from the body. In this way *Snehapana* helps in excreting bile from the liver, further it is eliminated from the body through the stool.

Following Ghritas are very effective for Snehapana

1. *Panch Gavya Ghrita*
2. *Kalyanaka Ghrita*
3. *Maha Tiktaka Ghrita*

Virechana helps in eliminating accumulated *Doshas* from the body. It is considered as the treatment for *Pittaja Vikaras*. *Kamala* is one among them and is

described as *Virechana Sadhya Vyadhi*. Probably that might be the reason to quote- “विरेचनं पित्तहराणां श्रेष्ठः.” A mild *Virechana* (purgation) is recommended with bitter drugs (*Tiktaka Dravya*). The bitter drugs possess the properties of ‘*पित्तहर*’ and such drugs may act as ‘*पित्तरेचक*’

Following drugs are used for Virechana

- *Goomutra*, *Godugdha* are mixed in equal quantity and administered internally for *Virechana*.
- *Danti Phala Kwath* and *Kashmari Phala Kwatha* are mixed in equal quantity and administered internally.

Shamana Chikitsa: The aim is to pacifying the involved *Doshas* i.e, *Pitta* and *Kapha*, since *Pitta* is carried to places away from *Kostha* because of obstruction due to *Kapha* and abnormal movement of *Vata*. Therefore, *Kaphahara* and *Pittahara* measures will help to cure the condition.

Chikitsa of Shakhasrita Kamala

In *Shakhasrita Kamala* there is *Avarodha* of *Ranjaka Pitta* due to *Kapha* in *Pitta Sthana*, because of this, *Ranjaka Pitta* cannot enter *Kostha* and stool will not be coloured by *Ranjaka Pitta* hence it is white. Thus, it can be relieved by removal of *Kapha*^[33] (कफहरैर्जयेत्). The following line of treatment helps in removal of *Kapha Dosh* situated in *Pitta Sthana*. Therefore, the drugs which possess *Katu*, *Lavana*, *Amla Rasa* and have *Tikshna*, *Ushana*, *Ruksha* properties, e.g, *Maricha*, *Pippali*, *Nagar* are effective in clearing the channels of *Ranjaka Pitta* in *Shakhasrita Kamala*.

The above said treatment such as *Ushna*, *Teekshana*, *Lavana* substance should be continued as long as the *Ranjaka Pitta* returns to *Kostha* (in its own seat) and appears in stool (*Pureesha*). When *Ranjaka Pitta* has reverted to its place, *Pureesha* gets its normal color and the symptoms of *Kamala* subside.

Chikitsa of Kosthashakhasrita Kamala

कामलायांतु पित्तघ्नं- The main aim of treatment is to eliminate *Ranjaka Pitta*, which is elevated in the blood.

Therefore, *Pittaghna* drugs are recommended.^[34] The main pathology lies in the blood i.e, असृकमासं दग्धवा (excessive haemolysis of RBC). Hence, it should be prevented.

पाण्डु रोग अविरोधि यत् - The line of treatment is designed in such a way that the drugs used should not cause adverse effects on *Pandu Roga*, which is the primary cause of this disease. While treating *Kosthashrita Kamala* care should be taken to restore the blood hence, *Panduta* is relieved.

A mild *Virechana* (purgation) is recommended with bitter drugs (*Tiktaka Dravya*). The bitter drugs possess the properties of 'पित्तहर'.^[35] Probably such drugs may act as 'पित्तरेचक' like that of *Katuki*.

Shamana Aushadha for Kamala: Several herbal, mineral and herbo-mineral preparations have been advocated in *Kamala Roga*.

Table 3: Showing various compound drugs of different Samhita.

Charak Samhita		
1.	<i>Churna</i>	<i>Navayasa Churna</i>
2.	<i>Bhasma</i>	<i>Mandur Bhasma</i>
3.	<i>Yoga</i>	<i>Swarna Kshiradi Yoga, Swarna Makshikadi Yoga, Yogaraj Rasayana</i>
4.	<i>Gutika</i>	<i>Mandurvataka, Punarnava Mandura, Shilajatu Vatak</i>
5.	<i>Avaleha</i>	<i>Darvyadileha, Dhatriyavaleha,</i>
6.	<i>Ghrita</i>	<i>Panchagavya Ghrita, Kalyanaka Ghrita, Katukadi Ghrita, Dadimadi Ghrita, Mahatiktadi, Dantighrita, Haridradi Ghrita, Pathya Ghrita, Draksha Ghrita, Vyoshadi Ghrita, Murvadi Ghrita.</i>
7.	<i>Aristha</i>	<i>Gaudaristha, Beejakarishtha, Dhatriyaristha, Phalaristha, Parpatadyaristha</i>
8.	<i>Swarasa</i>	<i>Triphala Swarasa, Amrita Swarasa, DaruHaridra Swarasa, Nimbapatra Swarasa, Bhunimba Tamalaki Swarasa</i>
9.	<i>Mutra Prayoga</i>	<i>Gomutra Prayoga, Gomutraharithaki, Ksheeramutrprayoga</i>
Susruta Samhita		
1.	<i>Avaleha</i>	<i>Vidangadya Avaleha</i>
2.	<i>Ghrita</i>	<i>Kaleyaka Ghrita, Patoladi Ghrita</i>
3.	<i>Others</i>	<i>Sasharakara Nishoth, Lauha Kitta, Urine of goat, Swarnamakshika/ Shilajatu with cow's urine</i>
Ashtanga Hridaya		
1.	<i>Churna</i>	<i>Tapyadi Churna</i>
2.	<i>Gutika</i>	<i>Navayas Lauha, Mandur Vataka</i>
3.	<i>Yoga</i>	<i>Partha Kalika Yoga</i>
4.	<i>Avaleha</i>	<i>Drakshadi Avaleha</i>
5.	<i>Prayoga</i>	<i>Ghrita Prayoga, Anjan- with Nisha, Gairik and Amla</i>
Yoga Ratnakar		
1.	<i>Churna</i>	<i>Navyasa Churna,</i>
2.	<i>Gutika</i>	<i>Ratnapradipokta Mandur Vatak</i>
3.	<i>Yoga</i>	<i>Lauha Yoga, Anjan Yoga, Nasya Yoga</i>
4.	<i>Avaleha</i>	<i>Amalakya Avleha, Triphaladya Avleha</i>
Sharangadhara Samhita		
1.	<i>Gutika</i>	<i>Chandraprabha Vati, Mandur Vatak</i>
2.	<i>Churna</i>	<i>Hapushadi Churna</i>
3.	<i>Avaleha</i>	<i>Kutaja Avaleha</i>
4.	<i>Aristha</i>	<i>Dashamoolaristha</i>
5.	<i>Swaras</i>	<i>Vasa Swaras, Phalatrikadi Kwatha, Apachyadi Bala Mool Swaras</i>
Bhaisajya Ratnavali		
1.	<i>Churna</i>	<i>Haridryadi Churna</i>
2.	<i>Yoga</i>	<i>Trimadapyadi Yoga</i>
3.	<i>Lauha/ Mandur/ Parpati</i>	<i>Navayas Lauha, Nisha Lauha, Vidangadi Lauha, Darvyadi Lauha, Taktadi Lauha, Chitrakadi Lauha, Kamalantak Lauha, Panchamrita Lauha Mandur, Trayushanadi Mandur, Lauha Parpati</i>

4.	<i>Avaleha</i>	<i>Darvyadileha, Amalakyavleha</i>
5.	<i>Ghrita</i>	<i>Panchgavya Ghrita, Mahatiktaka Ghrita, Haridradya Ghrita, Draksha Ghrita</i>
6.	<i>Taila</i>	<i>Punarnavadi Taila</i>
7.	<i>Swarasa/ Kwatha</i>	<i>Triphaladi Swarasa, Phaltrikadi Kwatha, Vasadi Kashaya</i>
8.	<i>Rasa</i>	<i>Chandra Suryatmaka Rasa</i>
9.	<i>Aristha</i>	<i>Dhatryaristha, Parpatadyaristha</i>
10.	<i>Others</i>	<i>Anjana- Dronapuspiranjana, Nasya</i>
Harita Samhita		
1.	<i>Churna</i>	<i>Baladi Churna, Shilajatu Churna</i>
2.	<i>Gutika</i>	<i>Amrita Vatak, Mandur Vatak</i>
3.	<i>Pindi/ Kwatha</i>	<i>Drakshadi Pindi, Baladi Kwatha</i>
4.	<i>Ghrita</i>	<i>Jeevanyadi Ghrita, Baladi Ghrita, Vasadi Ghrita, Amritprash Ghrita</i>
Others		
1.	<i>Swaras</i>	<i>Guduchi, Daruharidra, Nimba, Bhauamlaki Swarasa</i>
2.	<i>Lauha</i>	<i>Nisha Lauha, Dhatri Lauha, Vidangadi Lauha</i>
3.	<i>Rasa</i>	<i>Panchasya Rasa, Pandwari Rasa (R.R), Pranabhallav Rasa (R.S.S), Kamalantakar Rasa (R.Y.S)</i>
4.	<i>Nasya</i>	<i>Ankota Moola Nasya (G. N)</i>

Pathya- Apathya**Pathya**

Pathya for *Kamala* is one which is compatible to the body and one which is not conducive is *Apathya*. The term *Pathya* is also a synonym of *Chikitsa*. Disease can

be cured only by adopting the wholesome regimen or *Pathya*. In *Ayurveda*, description regarding *Pathya* for *Kamala* is widely available in *Charaka Chikitsa*. *Kamala* patients should only use that dietetics which do not vitiate *Pitta Dosh* and which subsides *Kapha*.^[36-37]

Table 4: Pathya for Kamala Roga.

	PATHYA	C.S	Su.S	A. S	A.H	B. P
1	<i>Puranasali</i>	+	+	+	-	+
2	<i>Puranayava</i>	+	+	+	-	+
3	<i>Purana Godhuma</i>	+	-	+	-	+
4	<i>Mudga</i>	+	-	+	-	+
5	<i>Aadaki</i>	+	-	+	-	+
6	<i>Masoora</i>	+	-	-	-	+
7	<i>Jangala Mamsarasa</i>	+	+	+	-	+
8	<i>Mridvika Toya</i>	+	-	+	+	-
9	<i>Amalaki Toya</i>	+	+	+	-	-
10	<i>Kola Phala (Snehayukta)</i>	-	+	-	-	-
11	<i>Amalaki (Snehayukta)</i>	-	-	-	-	-
12	<i>Ksheera</i>	-	-	+	-	-
13	<i>Ghrita</i>	-	-	+	-	-
14	<i>Vrisha Saka</i>	-	-	+	-	-
15	<i>Patola Saka</i>	-	-	+	-	-
16	<i>Parpatata Saka</i>	-	-	+	-	-
17	<i>Dadima Rasa</i>	-	-	+	-	-
18	<i>Khajura Rasa</i>	-	-	+	-	-

Apathya

Aharas: *Patra Saka, Hingu, Pinyaka, Tambula, Sarshapa, Sura, Mruttika, Amla Rasa, Lavana Rasa, Kulatha, Tikshna Aharha, Dustambu Pana, Viruddhasana, Dadhi, Ghrita, Matsya* and other *Pitta Vardaka Aharas*.

Viharas: *Vegaavarodha, Atapasevana, Ativyayama, Diwaswapana, Swedana, Raktamokshana, Vamana, Dhumapana, Maithuna, Aayasam*.

Manasika: *Chintha, Krodha*

DISCUSSION

Kamala is one of the *Vyadhis* described in detail in *Ayurvedic* literature. In *Charak Samhita* *Kamala* has been described as an advance stage of *Pandu*, whereas in *Susruta Samhita* it has been described as a complication of *Pandu Roga* as well as an independent disease entity. *Kamala* is also considered as a *Paittik Roga* caused by *Rakta Dushti* due to vitiated *Pitta* and vice-versa. A detailed description of *Nidana, Samprapti, Bheda, Roopa, Sadhyasadyata* and *Chikitsa* of *Kamala Roga* is mentioned in *Samhitas*. Various signs and symptoms of

Kamala are *Haridranetra*, *Haridratwaka*, *Haridranakha*, *Bhekavarna*, *Daha*, *Avipaka*, *Daurbalya*, *Sadan* and *Aruchi* etc.

The principal management of *Kamala* differs in *Ayurveda* from modern medicine. *Yakrit* (liver) is supposed to be the seat of *Raktavaha Srotas* and *Pitta* is believed to be the *Moola* of *Rakta*. Hence, the line of treatment adopted comprises of measures used for the pacification of *Pitta Dosha*. The herbs used for liver disorders possess properties which pacify the *Pitta Dosha*.

CONCLUSION

Most of the individual prefer *Ayurvedic* treatment for *Kamala*. In *Ayurveda*, *Kamala* is the disease related with *Pitta Dosha*. With *Ayurvedic* medicines, we can treat and avoid recurrence of *Kamala*. The management of *Kamala* and its complications along with drug, diet and lifestyle have been mentioned in *Ayurvedic* classics.

REFERENCES

- Vaidya Yadavaji Trikamji Acharya, Charak Samhita, Chakrapani Tika, Reprint, 2013; 528.
- Vaidya Yadavaji Trikamji Acharya, Sushruta Samhita, Nibandhsangraha and Nyayachandrika Panjika tika, Chaukhanba Prakashan, Varanasi, Reprint, 2014; 729.
- Hari Sadashivshashtri Paradkar, Ashtang Hriday, Sarvanga sundara and Ayurved Rasayana tika, Chaukhanbha Prakashana, Varanasi, Reprint, 2014; 519.
- Shastri K.N; Chaturvedi G.N; Charak samhita 8 ed. Chaukhambha bharti academy Varanasi, 1981.
- Shabdastoma Mahanidhi, 638.
- Vachaspatyam Part III, 1899.
- Ibid, 528-532.
- Vaidya Yadavaji Trikamji Acharya, Sushruta Samhita, Nibandhsangraha and Nyayachandrika Panjika tika, Chaukhanba Prakashan, Varanasi, Reprint, 2014; 729.
- Hari Sadashivshashtri Paradkar, Ashtang Hriday, Sarvanga sundara and Ayurved Rasayana tika, Chaukhanbha Prakashana, Varanasi, Reprint, 2014; 519.
- Vaidya Yadavaji Trikamji Acharya, Charak Samhita, Chikitsa Sthana 16/34, Chakrapani Tika, Reprint, 2013.
- Vaidya Yadavaji Trikamji Acharya, Charak Samhita, Chikitsa Sthana 16/7-9, Chakrapani Tika, Reprint, 2013.
- Vaidya Yadavaji Trikamji Acharya, Sushruta Samhita, Uttar Tantra 44/3, Nibandhsangraha and Nyayachandrika Panjika tika, Chaukhanba Prakashan, Varanasi, Reprint, 2014.
- Vaidya Yadavaji Trikamji Acharya, Sushruta Samhita, Uttar Tantra 44/5, Nibandhsangraha and Nyayachandrika Panjika tika, Chaukhanba Prakashan, Varanasi, Reprint, 2014.
- Vaidya Yadavaji Trikamji Acharya, Charak Samhita, Chikitsa Sthana 16/35-36, Chakrapani Tika, Reprint, 2013.
- Vaidya Yadavaji Trikamji Acharya, Sushruta Samhita, Uttar Tantra 44/11, Nibandhsangraha and Nyayachandrika Panjika tika, Chaukhanba Prakashan, Varanasi, Reprint, 2014.
- Kashyap Samhita Sutra Sthana Chapter 25/35.
- Ashtanga Samgraha Nidana Sthana 13/17.
- Hari Sadashivshashtri Paradkar, Ashtang Hriday; Nidana Sthana 13/16, Sarvanga sundara and Ayurved Rasayana tika, Chaukhanbha Prakashana, Varanasi, Reprint, 2014.
- Madhav Nidanam Nidana Sthana 8/17-18, with Madhukosha Sanskrit Commentary & Vidyotini, Hindi Commentary by Sudarshan Shastry Choukhambha Sanskrit Series, Varanasi; 16th Edn. (1986).
- Vaidya Yadavaji Trikamji Acharya, Sushruta Samhita, Uttar Tantra 44/12, Nibandhsangraha and Nyayachandrika Panjika tika, Chaukhanba Prakashan, Varanasi, Reprint, 2014.
- Hari Sadashivshashtri Paradkar, Ashtang Hriday, Nidana Sthana 13/18, Sarvanga sundara and Ayurved Rasayana tika, Chaukhanbha Prakashana, Varanasi, Reprint, 2014.
- Vaidya Yadavaji Trikamji Acharya, Charak Samhita, Chikitsa Sthana 16/ 37, Chakrapani Tika, Reprint, 2013.
- Vaidya Yadavaji Trikamji Acharya, Sushruta Samhita, Uttar Tantra 44/12, Nibandhsangraha and Nyayachandrika Panjika tika, Chaukhanba Prakashan, Varanasi, Reprint, 2014.
- Hari Sadashivshashtri Paradkar, Ashtang Hriday, Nidana Sthana 13/18, Sarvanga sundara and Ayurved Rasayana tika, Chaukhanbha Prakashana, Varanasi, Reprint, 2014.
- Madhav Nidanam Nidana Sthana 8/19, with Madhukosha Sanskrit Commentary & Vidyotini Hindi Commentary by Sudarshan Shastry Choukhambha Sanskrit Series, Varanasi; 16th Edn, 1986.
- Bhavprakash Pandu Rogadhikara, Pandu Rogadhikara.
- Vaidya Yadavaji Trikamji Acharya, Charak Samhita, Chikitsa Sthana 16/132-133, Chakrapani Tika, Reprint, 2013.
- Vaidya Yadavaji Trikamji Acharya, Sushruta Samhita, Uttar Tantra Chapter 44/14, Nibandhsangraha and Nyayachandrika Panjika tika, Chaukhanba Prakashan, Varanasi, Reprint, 2014.
- Hari Sadashivshashtri Paradkar, Ashtang Hriday, Nidana Sthana 13/18-19, Sarvanga sundara and Ayurved Rasayana tika, Chaukhanbha Prakashana, Varanasi, Reprint, 2014.
- Madhav Nidanam Nidana Sthana 8/24, with Madhukosha Sanskrit Commentary & Vidyotini, Hindi Commentary by Sudarshan Shastry Choukhambha Sanskrit Series, Varanasi; 16th Edn, 1986.

31. Vaidya Yadavaji Trikamji Acharya, Charak Samhita, Chikitsa Sthana 16/38, Chakrapani Tika, Reprint, 2013.
32. Madhav Nidanam Nidana Sthana 8/19-20, with Madhukosha Sanskrit Commentary & Vidyotini, Hindi Commentary by Sudarshan Shastry Choukhambha Sanskrit Series, Varanasi; 16th Edn, 1986.
33. Vaidya Yadavaji Trikamji Acharya, Charak Samhita, Chikitsa Sthana 16/124, Chakrapani Tika, Reprint, 2013.
34. Hari Sadashivshashtri Paradkar, Ashtang Hriday, Chikitsa Sthana 17/30, Sarvanga sundara and Ayurved Rasayana tika, Chaukhanbha Prakashana, Varanasi, Reprint, 2014.
35. Vaidya Yadavaji Trikamji Acharya, Charak Samhita, Chikitsa Sthana 16/40, Chakrapani Tika, Reprint, 2013.
36. Vaidya Yadavaji Trikamji Acharya, Charak Samhita, Chikitsa Sthana 16/41-42, Chakrapani, Reprint, 2013.
37. Vaidya Yadavaji Trikamji Acharya, Sushruta Samhita, Uttar Tantra Chapter 44, Nibandhsangraha and Nyayachandrika Panjika tika, Chaukhanba Prakashan, Varanasi, Reprint, 2014.
- 38.