

Sudhavarga Dravya in Bruhatrayi

Dr. Chandrakala R. K.¹, Dr. Prashanth A. S.²

¹Assistant Professor, Department of Kayachikitsa Sharada Ayurvedic Medical College and Hospital Yadgir-Karnataka, India

²Professor and Head, Department of Kayachikitsa Ayurveda Mahavidyalaya and Hospital Hubli-Karnataka, India

Abstract: In Ayurveda the drugs which are available is made up of herbal, animal or mineral source. In Bruhatraya almost all the formulations are prepared from herbal drugs and few formulations contain mineral and animal sources. Sudha varga dravya are groups of drugs that possess high calcium content in them. The data related to calcium supplements are scattered in Samhita and Rasashastra. In Rasamrita all the calcium compounds were categorized in a single group based on their chemical composition as "sudhavarga vijnaneeyam" based on chemical composition¹ All the drugs enlisted under sudhavarga dravya have calcium in compound form, as salt. Calcium has very essential role in physiology related to bone structure, muscular movement, regulation of gastro intestinal secretions and cardiac physiology. In Bruhatraya Sudhavarga dravya are not explained separately but some sudhavarga dravyas are used in some preparations. In Rasashastra Sudhavarga Dravya have attained its action in prevention and cure of many diseases like Amlapitta, Gragani, Parinamashoola, Hridroga Etc.

Keywords: Sudhavarga, Bruhatraya, calcium compound

1. Introduction

The literal meaning of the word "sudha" is ambrosia, nectar, honey of flowers, comfort, water milk, good drink, beverage of god's, etc.²

Sudhavarga Dravyas are mentioned in Rasatarangini, Rasamrita etc. The main compound of sudhavarga is Calcium compound. Calcium is one of the Major constituents of the human body formation. It is the most abundant mineral in the human body, Out of 99% deposition occur in bone and teeth, while 1% is present in blood and Muscles.

The daily requirement of calcium for women aged 50 years is 1000mg and 12000 for young adult. Due to some reasons people unable to take minimum requirement of calcium and may suffered from disorders related to bones.

As per Rasarnava and Rasaratnakara, Sudha, Koormaprishta, shanka, shukti & varatika are included under Sudhavarga. But according to Bruhatraya there is a not separate detail available about sudhavarga but in some context sudhavarga dravya are used.

2. Material and Methods

The Bruhatraya are referred to collect the information regarding sudhavarga.

Sudha Nirukthi and Uttapati

सुधा दृ सुखेन धोयते पोयते इति
अमृतम्। (श.क.द्र)

The literal meaning of the word "sudha" is ambrosia, nectar, honey of flowers, comfort, water milk, good drink, beverage of god's, etc.

Sudhavarga Dravya

शुक्लवर्गः सुधाकूर्मशंखशुक्तिवराटिका । (रसर्णव ५/४०)

चुन्नं कूर्मं शंखशुक्तिवराटैः शुक्लवर्गकः । (रसरत्नाकर २/६)

As per Rasarnava and Rasaratnakara, Sudha, Koormaprishta, shanka, shukti & varatika are included under Sudhavarga.

Table 1: Showing sudhavarga Dravya and common names

S.No	Name	Common Name	Origin
1	Sudha	Lime	Mineral
2	Khatika	Chalk	Mineral
3	Godanti	Gypsum	Mineral
4	Sankha	Conch shell	Mineral
5	Shambuka	Australian shell	Mineral
6	Mukta shukti	Pearl oyster shell	Mineral
7	Kaparda	Cowrie shell	Mineral
8	Kurmaprista	Turtel shell	Mineral
9	Samudraphena	Cuttle fish bones	Mineral
10	Pravala	Coral	Mineral
11	Muktha	Pearl	Mineral
12	Mrigashringa	Deer antlers	Animal
13	Kukkutanda twak	Hen's eggs shell	Animal
14	Ajasthi	Goats bones	Animal

The Reference of Sudhavarga Dravya In Charaka Samhita.

PRAVALA³

In Dwithiya Bramha Rasayana Pravala is used as Prakshepaka dravya.

PRAVALA, MUKTHA, SHANKHA⁴

In Dwithiya Indroktha Rasayana tPravala, Muktha and Shankha are used as Parkshepaka Dravya.

SHANKHA, MUKTHA⁵

In Dahaja Jwara-Shankha, Muktha along with other sheetala drugs should keep on vakshapradesha.

SHANKHA⁶

For Sadhya shaman of Raktha Pitta, Peya is Prepared with Shankha bhasma mixed with chandana churna, sharkara and tandulodaka.

MUKTHA, SHANKA⁷

Vaiduryadi panaka-Vaidurya, Muktha, Mani, Gairika, Mrit, Shankha, hema and Amalaka are kept overnight mixed with Honey mixed or sugarcane. It elevates Raktha Pitta.

SHANKHA⁸

In Nasagata raktapitta, stambhana yoga prepared with Nilotpala, Gairika, shankha, and chandana made into fine powder and bhavana with sharkarajala, this can use as avapidana Nasya.

MUKTHA⁹

Raktapitta nashaka vihara-In burning sensation contact with utensils made up of Vaidurya, Muktha, Mani cooled with water should be done.

SAMUDRAPHENA¹⁰

In Kusta Chikitsa if the lesions are stiff, there is no sensation and no perspiration then the lesions are rubbed with samudraphena.

MUKTHA, PRAVALA AND SHANKHA¹¹

Mukthadi churna-Mukthadi churna along with Madhu take for one year it cures Hikka Swasa and Kasa.

MUKTHA, PRAVALA AND SHANKHA¹²

Mukthadi churna-Mukthadi churna applied external as Anjana cures timira, Kacha, nilika, tama etc.

SHANKHA¹³

In Rakthaja Atisara-Raktha sangraahi yoga prepared with Krishna mrit, Madhuka, Shankha, Rudira all ingredients should take in equal quantity an made into churna form, take 2-3gms this churna along with Madhu and Tandulodaka.

SHANKHA¹⁴

In Visarpa chikitsa Shadwaladi pradeha is prepared with shadwala, kusha, shankha, raktha chandana, Nilotpala,

MUKTHA¹⁵

In visarpa Chikitsa pradeha is prepared with Mukthapista.

SHANKHA, PRAVALA, SUKTHI¹⁶

In visarpa chikitsa Pradeha is prepared with shankha Pravala, Sukthi and Gairika made into fine powder and applied with Gritha.

MUKTHA¹⁷

In Kita Visha chikitsa, Muktha pisti applied over the kitadamsha sthana, it cures the shotha, daha, toda amd jwara.

SUKTHI CHURNA¹⁸

For Vrana Ropana, Panchavalkala churna and sukthi churna are used as Avachurnana.

SHANKHA¹⁹

Sumanahakoradi Varti-Varthi is prepared with Sumanaha koraka, Shankha, Triphala, Madhuka, Bala are taken in

equal quantity bhavana with varsha jala. This Varti is used as Anjana in Rakthaja and Pittaja Netraroga.

SHANKHANABHI, SAMUDRAPHENA²⁰

Saindhavadi varti-Saindhava, Triphal, Yosha, Shankhanabhi, Samudraphena, Shaileyaka and sarjakshara are made into fine powder and Varthi is prepared. This Varthi cures the Kaphaja Netra roga.

SHANKHA, PRAVALA²¹

Shankhadi Varti-Varthi is prepared with shankha Bhasma, Pravala bhasma, vaidurya bhasma, Tamra Bhasma, loha bhasma, swethanjana, srotanjana and maricha all are taken in equal quantity and varthi is prepared. This varthi is used as Anjana it cures all the Netravikara.

SAMUDRAPHENA²²

Churnanjana-Maricha (1/2shana), Pippali (1shana), Samudraphena(1shana) saindhava lavana (1/2shana) souviranjana (9shana) all are made into paste on chitta nakshra. This churnanjana is indicated in kandu kaacha and all kaphaja Netravikara.

SHANKHA, SAMUDRAPHENA, KIKKUTANDA TWAK²³

Sukhavati Varti-kataka Beeja, shankhabhasma, saindhava lavana, triushana, sita, samudraphena, rasanjana, Madhu, Vidhanga churna Manashila and kukkutanda Twak are are taken in equal quantity and made into fine powder. This powder mixed with Madhu and varthi is prepared. Anjana is done with this varthi cures the Timira, Patala, Kacha an Netramala.

SAMUDRAPHENA, KUKKUTANDA TWAK²⁴

Drustiprada varti-Varthi is prepared with Triphala, kukkutanda twak, kasisa Bhasma, Loha Bhasma, Nilakamala, vidanga and samudraphena all are taken in equal quantity and made into fine powder then bhavana is given with ajaksheera.

SUKTI²⁵

Baladi Gritha-Kashaya is prepared with 1/4th part of Bala, Bilwa twak kashaya and equal quantity of ksheera then grith paka is done. In shirogata Vayu this Gritha used for nasya karma.

The Reference of Sudhavarga Dravya in Sushruta Samhita**Sukthi**²⁶

In Pleehodara Chikitsa Sukthi kshara is given along with Milk.

Sukthi²⁷

In Ajagalika chikitsa After Rakthamokshana Lepa should be prepared with sukthi, sarjakshara and Yavakshara.

Shankha²⁸

In Piitaja abhishandha varthi is prepared with Talisa, ela, gairika, usira, and shankha are grounded and bhavana with stanya.

Muktha, shankha²⁹

In Suktika chikitsa Fine powder of vaidurya, sphatika, vaidruma, muktha, shankha, rajatha and hema mixed with honey and applied as anjana.

Shankha³⁰

In shleshmaja Abhishanda Anjana is prepared with Balaka, kusta, devadaru, shankha, Patha, Amalaka, trikatu and Manashila pounded with water.

Samudraphena³¹

In Praklinavartma-Varthi is prepared with Kasisa, samudraphena, rasanjana and buds of jati rubbed with honey.

Shankha³²

In Rakthaja abhishanda Anjana prepared from Shankha, Haratala, tutha, Daruharidra and saindhava and honey.

Shankha³³

In Arjuna Chikitsa eye drops are prepared with sphatika, vaidurya, shankha, madhuka and madhu.

Shankha, samudraphena³⁴

In Arjuna Chikitsa Varthi is prepared with Shankha and samudraphena made into paste with honey and sharkara and used as Anjana.

Kukkutanda twak³⁵

In Abhishanda Anjana is prepared with Crust of hen's egg, trikatu, karanja beeja and ela these called as Lekhana Anjana.

Shankha³⁶

In Sukra nashana Anjana is prepared with tamrabhasma, shankha, manashila, maricha and saindhava.

Shankha³⁷

In Sukra nashana Anjana prepared with Shankha, kola beeja, kataka draksha, madhuka and Honey.

Samudraphena³⁸

In Sukra nashana Anjana is prepared with Honey, Samudraphena and Shirisha pushpa.

Shankha³⁹

In Sukra nashana Anjana prepared with Dehusked Greengram roasted and mixed with shankha, honey and sharkara.

Shankha, sukti⁴⁰

In Sukra nashana Anjana is prepared with shankha, sukti, Draksha, Madhuka and kataka.

Shankha, sukti samudraphena, pravala, muktha⁴¹

Curna Anjana-In Arma, sirapidaka and sirajala Shankha, Samudraphena, Muktha, sphatika, kurvinda, pravala, ashmantaka, vaidurya pulaka, sukti and loha and Tamra bhasma all take in equal quantity and mixed with Srotanjana.

Samudraphena⁴²

Rasakriya prepared with Decoction of triphala mixed with gomutra, go grutha and samudraphena.

Shankha⁴³

In kaphaja timira Rasakriya is prepared with Manashila, trikatu, shankha, and makshika.

Muktha⁴⁴

In Drustigata roga Anjana is prepared muktha, vaidurya are should be pounded with goats milk.

Samudraphena⁴⁵

In Drustigata roga Anjana is prepared with srotanjana vaidurya, samudraphena manashila and maricha.

Shankha, samudraphena⁴⁶

Lekhana Putapaka -Lekhana putapaka consists of liver and neighboring tissues of wild animals combine with scrapping drugs such as loha, tamra, shankha and saindhava samudraphena, kasisa srotanjana and dadi mastu.

Muktha⁴⁷

In Sauviranjana Muktha is used as prakshepaka dravya.

Kukkudanda twak⁴⁸

Badrodaya Anjana Kukkutanda Twak is one of the Ingredient.

Kukkudanda twak⁴⁹

In Suklarma chikitsa Varthi is prepared with Manashila, devararu, kukkutanda shell etc, take in equal quantity should be pounded with payasa and varti is prepared. It cures the kandu, timira, suklarma and raktharajju.

Shankha⁵⁰

In Nayana Vikara Anjana is prepared with Manashila, maricha, shankha, saindhava, guda Rasanjana and Honey.

Shankha⁵¹

In Nayana vikara Rasanjana pasted with shankha and saindhava lavana pounded with curd for half a fortnight removes child's corneal opacity.

Samudraphena⁵²

In Karnashoola Avachoorna with samudraphena churna

The Reference of Sudhavarga Dravya in Astanga Hridaya Samhita.**Shankha**⁵³

In Ratkthatisara Chikitsa Krishnamrit, shankha, yasti, madhu blood of goat and tandulodaka cures Rakthatisara.

Shankha, pravala, Sukti⁵⁴

In Pitaja visarpa chikitsa lepa is prepared with Paste of shankha or Pravala or sukti or gairika added with gritha cures the Visarpa.

Pravala⁵⁵

In Kaphaja mutrakrichra Peya jala is prepared from Pravala churna mixed with tandulodaka.

Shankha⁵⁶

Switra chikitsa-Lepa is prepared with snuhi, arka ksheera and shakha etc.

Shankha⁵⁷

Hema, matsyaksaka and shankha taken with madhu and Gritha for 1year it acts as rasayana and Improves vapu, medha, varna balakaraka.

Muktha, shankha⁵⁸

Curnanjana Timira chikitsa

Shankha⁵⁹

Timira, arma, raktharaji, kandu and kach

Shankha⁶⁰

Krishna sarpa vasa, shankha, kataka and srotanjana are processed into Rasakriya. It acts as Drustiprasadaka.

Shankha⁶¹

Sarvanetravikara

Muktha⁶²

The varti made with sariva, padmaka, usira, Muktha, shabara and Chandana.

Samudraphena, shankhanabhi⁶³

In Kaphaja Adhimanth Anjana is prepared with Saindhava, Triphala, trikatu, shankhanabhi, sanudraphena saileyaka and sarja are made into varti.

Shankha⁶⁴

In pitta-Rakthaja Adhimanth Anjana is prepared with Buds of sumanas, shankha, triphala, madhuka and bala made into varti.

Samudraphena⁶⁵

Anjana is prepared with Rasanjana, sarjarasa, ritipuspa, manashila, samudraphena, lavana and gairika made into paste with honey it cures kandu and kleda.

Shankhanabhi⁶⁶

In Pilla and sukraka roga varthi is prepared with saindhava, triphala, Krishna, katuka, shankhanabhi and tamra.

Muktha⁶⁷

Pindanjana -Drustiprasadaka

Shankha⁶⁸

Anjana yoga-In siraharsha Anjana is prepared with Sphatika, kunkuma, shankha and madhuka made into paste.

Shankha and samudraphena⁶⁹

Anjana yoga -In siraharsha Anjana is prepared with Shankha and phena with honey or sharkara.

Shankha, Mukta and samudraphena⁷⁰

Dhantavarti-Teeth of elephant, boar, camel, cow, horse, goat and as ad shankha, muktha and phena mixed with quarter part of maricha are grounded and varti is prepared.

Shankha, samudraphena⁷¹

A varti is prepared from tamala, godhanti, shanka, samudraphena, tamra bhavana with gomutra and used as anjana.

Shankha⁷²

In Sukraroga For gharshana of hard sukra-shankha, kola, kataka, draksha, madhuka and maksika are used.

Shankha⁷³

In Sukraroga For gharshana-Mudga mixed with shankha.

Shankha, samudraphena⁷⁴

In sukraroga Anjana is prepared with Shankha and samudraphena get bhavana with arjuna kashaya.

Shankha⁷⁵

In Kukunaka and pothaki chikitsa Varti is prepared with ela, rasona, shankha usana, phanijaka and katphala.

3. Discussion

The detail explanation of Sudhavarga dravya is available in Rasa shastra because during Rasayuga metal are used in the different disease. In Rasayoga Lower metas are converted in higher metal, hence minerals are used abundant. During samhita kala Majority herbal preparation have used because of availability of herbs. Hence there is no separate explanation of sudhavarga in samhita.

4. Conclusion

In context to present review it can be concluded that the article is attained to review the reference of sudhavarga dravya in Bruhatraya for further study of Researcher.

Referances

- [1] Yadavji Trikamji Rasaamritha, Translated by Dr Joshai damodar, First edition 1998, Chaukambha sankrith Bhavan, Varanasi 313-PP, P. No-118.
- [2] Spok.ensanskrit.de/index.php.
- [3] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukambha Vishawa Bharathi, Varanasi Chikitsa sthana 1/1 Verse58 P.No 11.
- [4] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukambha Vishawa Bharathi, Varanasi Chikitsa sthana 1st chapter 4th pada Verse22 P.No 41.
- [5] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukambha Vishawa Bharathi, Varanasi Chikitsa sthana 2nd chapter Verse32 P.No 108.
- [6] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukambha Vishawa Bharathi, Varanasi Chikitsa sthana 4th Chapter Verse2273P.No 131.
- [7] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukambha Vishawa Bharathi, Varanasi Chikitsa sthana 4th chapter Verse79 P.No 132.
- [8] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukambha Vishawa Bharathi, Varanasi Chikitsa sthana 4th chapter Verse99 P.No 103.

- [9] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukhambha Vishawa Bharathi, Varanasi Chikitsa sthana 4th chapterVerse106 P.No 163.
- [10] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukhambha Vishawa Bharathi, Varanasi Chikitsa sthan V 7th chapter verse57 P.No 188.
- [11] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukhambha Vishawa Bharathi, Varanasi Chikitsa sthana 17th chapterVerse125 P.No 433.
- [12] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukhambha Vishawa Bharathi, Varanasi Chikitsa sthana 17th chapter Verse128 P.No 433.
- [13] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukhambha Vishawa Bharathi, Varanasi Chikitsa sthana 19th chapter Verse82 P.No 478.
- [14] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukhambha Vishawa Bharathi, Varanasi Chikitsa sthana 21st chapter Verse75 P.No 511.
- [15] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukhambha Vishawa Bharathi, Varanasi Chikitsa sthana 21st chapter Verse 75 P.No 568.
- [16] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukhambha Vishawa Bharathi, Varanasi Chikitsa sthana 21st chapter Verse 82 P.No 612.
- [17] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukhambha Vishawa Bharathi, Varanasi Chikitsa sthana 21st chapter Verse82 P.No. 568
- [18] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukhambha Vishawa Bharathi, Varanasi Chikitsa sthana 25th chapterVerse 67P.No 612.
- [19] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukhambha Vishawa Bharathi, Varanasi Chikitsa sthana 25th chapter Verse67 P.No 612.
- [20] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukhambha Vishawa Bharathi, Varanasi Chikitsa sthana 26th chapter Verse 24IP.No 660.
- [21] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukhambha Vishawa Bharathi, Varanasi Chikitsa sthana 26th chapter Verse242 P.No 661.
- [22] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukhambha Vishawa Bharathi, Varanasi Chikitsa sthana 26th chapter Verse246 P.No 661.
- [23] Chakrapani datta :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukhambha Vishawa Bharathi, Varanasi Chikitsa sthana 26th chapter Verse254 P.No 661.
- [24] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukhambha Vishawa Bharathi, Varanasi Chikitsa sthana 26th chapter Verse255 P.No 661.
- [25] Chakrapani data :Charaka samhita English Translation by Dr P.V Tewari, Firstedition 2019, Chaukhambha Vishawa Bharathi, Varanasi Chikitsa sthana 28th chapter Verse123 P.No 708.
- [26] Sushruta :Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishawabharati Varanasi, Chikitsa sthana 14th chapter verse 13 P.NO-405.
- [27] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishawabharati Varanasi, Chikitsa sthana 20th chapter, verse 3, P.NO-461.
- [28] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishawabharati Varanasi, Uttara tantra 10th chapter, verse 8 P.NO-157.
- [29] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishawabharati Varanasi, Uttara tantra 10th chapter, verse 18P.NO-159.
- [30] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishawabharati Varanasi, Uttara tantra 11th chapter, verse 8, P.NO-162
- [31] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishawabharati Varanasi, Uttara tantra 11th chapter, verse 15, P.NO-164.
- [32] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishawabharati Varanasi, Uttara tantra 12th chapter, verse 16 P.NO-168.
- [33] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishawabharati Varanasi, Uttara tantra 12th chapter, verse 22, P.NO-169.
- [34] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishawabharati Varanasi, Uttara tantra 12th chapter, verse 22, P.NO-169.
- [35] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishawabharati Varanasi, Uttara tantra 12th chapter, verse 25, P.NO-170.
- [36] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishawabharati Varanasi, Uttara tantra 12th chapter, verse 29, P.NO-170.
- [37] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishawabharati Varanasi, Uttara tantra 12th chapter, verse 31, P.NO-170.
- [38] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishawabharati Varanasi, Uttara tantra 12th chapter, verse 31, P.NO-170.
- [39] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishawabharati Varanasi, Uttara tantra 12th chapter, verse 32, P.NO-170.

- [40] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishwabharati Varanasi, Uttara tantra 12th chapter, verse 32, P.NO-170.
- [41] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishwabharati Varanasi, Uttara tantra 15th chapter, verse 24-25, P.NO-185.
- [42] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishwabharati Varanasi, Uttara tantra 17th chapter, verse 19, P.NO-193.
- [43] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishwabharati Varanasi, Uttara tantra 17th chapter, verse 43, P.NO-200.
- [44] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishwabharati Varanasi, Uttara tantra 17th chapter, verse 96, P.NO-208.
- [45] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishwabharati Varanasi, Uttara tantra 17th chapter, verse 97, P.NO-209.
- [46] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishwabharati Varanasi, Uttara tantra 18th chapter, verse 25, P.NO-214.
- [47] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishwabharati Varanasi, Uttara tantra 18th chapter, verse 92, P.NO-225.
- [48] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishwabharati Varanasi, Uttara tantra 18th chapter, verse 96, P.NO-226.
- [49] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishwabharati Varanasi, Uttara tantra 18th chapter, verse 101, P.NO-226.
- [50] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishwabharati Varanasi, Uttara tantra 19th chapter, verse 14, P.NO-231.
- [51] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishwabharati Varanasi, Uttara tantra 19th chapter, verse 16, P.NO-232.
- [52] Sushruta Dalhana ;Sushruta samhita English translation by Dr P.v sharma edition 2018, chaukambha vishwabharati Varanasi, Uttara tantra 21st chapter, verse 26, P.NO-242.
- [53] Vagbhata, Astanga Hridaya, English Traslation By Dr B.Rama Rao, edition 2019, Chaukambha vishwabharati Varanasi, chikitsa sthana 9th chapter, verse 83 P.No-306.
- [54] Vagbhata, Astanga Hridaya, English Traslation By Dr B.Rama Rao, edition 2019, Chaukambha vishwabharati Varanasi, chikitsa sthana 18th chapter, verse 13 P.No-410.
- [55] Vagbhata, Astanga Hridaya, English Traslation By Dr B.Rama Rao, edition 2019, Chaukambha vishwabharati Varanasi, chikitsa sthana 11th chapter, verse 13 P.No-326
- [56] Vagbhata, Astanga Hridaya, English Traslation By Dr B.Rama Rao, edition 2019, Chaukambha vishwabharati Varanasi, chikitsa sthana 9th chapter, verse 83 P.No-434.
- [57] Vagbhata, Astanga Hridaya, English Traslation By Dr B.Rama Rao, edition 2019, Chaukambha vishwabharati Varanasi, Uttarantra 1st chapter, verse 47 P.No-10.
- [58] Vagbhata, Astanga Hridaya, English Traslation By Dr B.Rama Rao, edition 2019, Chaukambha vishwabharati Varanasi, Uttarantra 13th chapter, verse 22 P.No-100.
- [59] Vagbhata, Astanga Hridaya, English Traslation By Dr B.Rama Rao, edition 2019, Chaukambha vishwabharati Varanasi, Uttarantra 13th chapter, verse 23 P.No-100.
- [60] Vagbhata, Astanga Hridaya, English Traslation By Dr B.Rama Rao, edition 2019, Chaukambha vishwabharati Varanasi, Uttarantra 13th chapter, verse 41 P.No-103.
- [61] Vagbhata, Astanga Hridaya, English Traslation By Dr B.Rama Rao, edition 2019, Chaukambha vishwabharati Varanasi, Uttarantra 13th chapter, verse 45 P.No-104.
- [62] Vagbhata, Astanga Hridaya, English Traslation By Dr B.Rama Rao, edition 2019, Chaukambha vishwabharati Varanasi, Uttarantra 13th chapter, verse 65 P.No-107.
- [63] Vagbhata, Astanga Hridaya, English Traslation By Dr B.Rama Rao, edition 2019, Chaukambha vishwabharati Varanasi, Uttarantra 13th chapter, verse 22 P.No-100.