# UNKINKING THE CONCEPT OF DOSHA KSHAYA AND ITS IMPACT ON DISEASE CAUSATION

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#### **ABSTRACT:**

Ayurveda, the Life science is based on Tridosha siddhanta (Vata, Pitta and Kapha). Fundamentals of Ayurveda are explained in Trisutras- i.e. Hetu(cause), linga (symptoms) and Aushadha (medication). Roganidana comprises of 2/3<sup>rd</sup> among these trisutras of Ayurveda which deals with finding out the hetu or causative factors and linga or symptoms of the disease. A Physician should know to examine the disease by its features and later which helps to plan appropriate treatment. Ayurveda states that diseases are caused due to vishama doshas which includes vruddhi, kshaya, prakopa etc. Clinically, often vruddhi is given more significance than kshaya in causation of disease, leaving behind the role of ksheena doshas in contributing to vyadhi samprapti. The objectives of article are fulfilled by reviewing the broader aspect of dosha kshaya which includes kshaya karanas and its clinical features ( lakshanas). In this article an attempt is made to gather the complete information regarding dosha kshaya and to understand whether dosha in ksheenavastha is capable of producing disease or not.

Keywords: Ayurveda, Trisutras, vishama doshas, dosha kshaya.

# **INTRODUCTION:**

The science of Ayurveda originated with the need to understand and cure diseases and to maintain health for human being. This basic Ayurveda is best expressed in order to achieve health stating "swastasya swastya rakshanam, aturasya vikara prashamanam| i.e. to maintain the healthy status of the normal person and to relieve the symptoms of patients who are suffering with the disease. The principles of Ayurveda is based on the concept of Tridosha (three humours) viz Vata, Pitta and Kapha. Tridoshas are responsible for sustenance of body. A lost equilibrium of tridoshas will lead to disease which includes dosha kshaya (state of diminution) and dosha vruddhi (state of aggravation) 2.Dosha kshaya is a state where doshas undergo diminution due to various causes and manifests lakshanas. At times it contributes even to samprapti of vyadhis. According to the classics, kshaya is more troublesome than vruddhi, but because people don't comprehend the significance of ksheena doshas, kshaya is clinically less significant. Fundamentals of Ayurveda are explained in Trisutras- i.e. Hetu (cause), linga (symptoms) and Aushadha (medication). Roganidana comprises of 2/3rdamong these trisutras of Ayurveda which deals with finding out the hetu or causative factors and linga or symptoms of the disease. Hence, in this article an attempt has been made to explain the concept of dosha kshaya and its relevance in

causation or non-causation of the disease manifestation as per the classical references in detail on the lines of *trisutras* and to understand whether *dosha* in *ksheenavastha* is capable of producing disease or not.

#### **OBJECTIVES:**

- 1. To study the Nirukti of Dosha Kshaya and understand dosha kshaya on lines of Trisutras.
- 2. To know the Importance of *Dosha kshaya*.
- 3. Role of *Dosha* in *Ksheenavastha* in causation or non-causation of disease.
- 4. To know the Ashtadasha (18) lakshanas of Kshaya.
- 5. To know the Karanaas for Dosha Kshaya.
- 6. Samanya (general) and Vishesha (specific) lakshanas of Dosha Kshaya and role of Ksheena doshas in causation of symptoms.
- 7. Factors to elicit Dosha Kshaya.
- 8. To do the diagnosis of dosha kshaya based on nidana and upashaya.
- 9. Role of *Dosha Kshaya* in Differential Diagnosis.

#### **MATERIALS AND METHODS:**

## Methods of collection of data:

The literary source for the present study was obtained from,

- ❖ Charaka Samhita with commentary
- ❖ Sushurta Samhita with commentary
- ❖ *Asthang Hrudaya* with *commentary*
- Shabdha kalpa druma.
- ❖ and other translated Ayurveda textbooks of Roganidana.

**SOURCE OF DATA:** Library, S.J.G. College of *Ayurveda* and Hospital, Research Centre, Koppal.

1.Nirukti of dosha and kshaya:

"Dosha"- dush vaikrute means that which is capable of vitiating.<sup>4</sup>

The meaning of *dosha* is defect. Actually these are endogenous factors which govern all the body activities right from conception till death. As they are able to produce defect in all the body elements they are called as *dosha*. They are named as *Vata*, *Pitta* and *Kapha doshas*. <sup>5</sup>

"Kshaya"- pralaya (that which causes destruction) or Apachaya (which is in the state of diminution).<sup>6</sup>

According to commentator Chakrapani; *Kshaya* (diminution), *Sthana* (normalcy) and *Vruddhi* (aggravation) are the measure (*maana*) of *Doshas* and the variation (*vikalpa*) of *doshas* happens due to the conjunction and disjunction of the *doshas*.<sup>7</sup>

2. Understanding dosha kshaya on lines of trisutra:

Ayurveda has presented itself in the form of three basic forms i.e. trisutras which includes hetu, linga and aushadha. Hetu deals with etiological factors, linga refers to manifestation of lakshanas(clinical features) and aushadha is the medication for managing vyadhi(disease). So, understanding dosha kshaya concept on the lines of trisutras would render a gross idea about subject. Hence dosha kshaya is analysed on the basis of trisutras of Ayurveda.

# 3. Importance of Dosha kshaya:

Dosha kshaya is mentioned as one of the *trividha gati* (three types of movement of *doshas*), where *gati* has to be understood as "the state of *doshas*" rather than "movement of *doshas*". "Malochitatvaat dehasya kshayo vruddhestu peedanah" — Both increase and decrease of malas are painful to the body. Kshaya is more troublesome than vruddhi as it is very uncommon and unexperienced. 9 where it is further clarified that "mala" has to be understood as dosha, dhatus and mala. This is due to the reason that, body is auchitya (accustomed) to vruddhi whereas it is anouchitya (unaccustomed) to kshaya. 10

Doshas which are not in state of equilibrium (vishama doshas) are capable of destroying the body. The word Vishama here refers to both kshaya and vruddhi of doshas. Hence, protecting oneself from kshaya is as equally important as protecting oneself from vruddhi.<sup>11</sup>

Bala kshaya happens when there is kshaya of doshas, dhatu and mala in the body. 12

It is explained that, an *abuddha* (ignorant person) cannot distinguish between *vruddhi* and *kshaya* and would instead treat any condition as *vruddhi*<sup>13</sup>. Considering the above mentioned reasons, it is clear that understanding the concept of *dosha kshaya* is very important and plays a vital role in causation of disease.

Charakacharya explains regarding different states of doshas as,

"Doshaaha pravruddhaaha swa<mark>m lingam da</mark>rshay<mark>anti yathaa</mark>balam/

Ksheenaa jahati lingam swam, samaaha swam karma kurvate||"14

Pravruddha dosha (aggravated doshas) manifest their <u>linga</u> (symptoms/ abnormal features according to degree of vitiation. Ksheena dosha (diminished doshas) give up their <u>linga</u> (features). Samadosha- Doshas in a balanced state maintain their swakarma (normal functions).

Chakrapani comments on the above verse as, (Role of *Ksheena Dosha* in causation or non-causation of disease);

- "Lingam swam ja<mark>hate</mark>etyanena k<mark>she</mark>enaanaam prakrutilinga<mark>ksha</mark>yavyatiriktam vikaarakartrutvam naasteeti darshayati; yatho vruddhaa unmargagaamiti doshaa dooshyam dooshayanto jwaraadeen kurvanti na ksheenaaha:,swayameva dusthitatvaat | "15"
- -"lingam swam jahati"- means give up own features. It suggests that their normal characteristic features diminished and can't produce any abnormality. The aggravated doshas only can move in the upward direction and vitiates Dushyas (Rasa, Rakta etc) and thereby manifests jwara (fever) and other disorders. But the doshas in their diminished state are unable to produce any disorder because they themselves are weak or in the ill condition.

Types of Kshaya lakshanas (Ashtadasha)<sup>16</sup>- There are 18 types of Kshaya (diminution) lakshanas;

"vaataadeenam rasaadeenaam malaanaamojasastatha|"- The features of diminished state of vata and the other doshas(3), Rasa and other doshas (7) and Trimalas-mutra, pureesha and sveda along with khamalas (7) and Ojas(1) are explained.

## Kaaranas(causes) for dosha kshaya:

- -Intake of substances having qualities opposite to that of *doshas* (*viparita guna abhyasa*) or intake of substances having qualities predominantly opposite to that of *doshas* (*viparita guna bhuyishta abhyasa*).<sup>17</sup>
- -Excessive elimination therapy (ati apatarpana nimitta).
- -Ashraya ashrayi bhava sambandha (kshaya in ashraya will lead to kshaya in ashrayi also). 18
- -Other kshaya hetus like exercise (vyayama), lack of intake of food (anashana), over thinking (chinta), intake of dry food (ruksha ahara), intake of less quantity of food (alpa ahara), consuming food pertaining to single taste (ekarasa ahara), exposure to wind (vata), sun (atapa), fear (bhaya), sorrow (shoka), consumption of dry natured liquids (rooksha pana), staying awake at night (ratri jagarana), excessive elimination of kapha(phlegm), rakta(blood), shukra(semen) and mala(excretory products), due to variation in time (adana kala, vruddha avastha) which is generally debilitating in nature, due to bhuta upaghata (infliction of bhutagraha). These are explained under ojo kshaya lakshanas in Charaka samhita.

## Samanya lakshanas:

General symptoms of *dosha kshaya* are *swakarma hani* (diminution in normal functions of *ksheena doshas*) and *virodha karma vruddhi* (increase in the function that are opposite to *ksheena doshas*) where *Acharyas* state that *virodha karma vruddhi* does not necessarily take place every time.<sup>20</sup>

Samanya Tridosha kshaya kaaranas are as follows,

"vyaayaamo anashanam chintaa rookshaalpapramitaashanam/

Vaataatapav bhayam s<mark>hoko</mark> rooksh<mark>ap</mark>aanam prajaagaraha//

Kaphashonita shukraana<mark>am</mark> malaa<mark>naa</mark>m chaativarta<mark>nam/</mark>

Kaalo bhootopaghaatascha jnaatavyaaha kshayahetavaha||<sup>21</sup>

- -Indulging in physical exercise, fasting, worries, intake of dry food in less quantity and which has only one rasa or taste.
- -Exposure to wind and sun, indulging in fear, grief and dry liquids and waking throughout night.
- -Excessive excreation of kapha, rakta, shukra and mala.
- -Time factor due to oldage or Adanakala and affliction by Bhootopaghata i.e. evilspirits.

#### Vishesha lakshana<mark>s :</mark>

The vishesha lakshanas according to various Acharyas are mentioned as follows in tabulated form,

Table 01- Vishesha kshaya lakshanas of tridoshas. 22,23,24

Vata kshaya lakshanas	Pitta kshaya lakshanas	Kapha kshaya lakshanas
Weakness of the body	Decreased body temperature	Laxity of joints
Feeble or reduced sleep	Decreased appetite	Lack ofsleep/ wakefulness
Altered or loss of	Loss or decreased lustre	Thirst
consciousness		
Decreased activity	Feeling of coldness	Loss of strength
Lack of enthusiasm or	Stiffness	Dryness in skin
happiness		
Kapha vruddhi lakshanas can	Pain in uncertain types and	Feeling of internal burning

be seen	uncertain time	sensation
	Tremors	Palpitation
	Dryness	Feeling of emptiness in
		sleshmakshaya
	Whitish discoloration of nails	Vata vruddhi lakshanas can
	and eyes	be seen
	Feeling of heaviness	

#### Role of *Ksheena doshas* in causation of lakshanas:

It can be discussed with the following examples;

- -In *artava kshaya*, though *shodhana* is indicated, *acharya dalhana* specifically mentions *vamana* due to *pitta kshaya*. In *stanya kshaya*, *shleshma vardhana dravyas* are told due to *kapha kshaya*.<sup>25</sup>
- -In vyadhis like pakshagata, gadgada vak etc, the movement of vayu is affected. This is due to diminution in chala guna of vata leading to gati karma hani (decreased motor activity). Therefore, treatment should be focussed on increasing the chala guna of vata.
- In rakta atipravrutti chikitsa, sour foods are suggested to balance the agni and pitta because rakta kshaya might lead to pitta kshaya (ashraya ashrayi bhava sambandha).<sup>26</sup>
- -In atyagni, vitiated pitta and maruta/ vata dosha causes the disease in individuals having diminished kapha.<sup>27</sup> When gunas of kapha are analysed, there is diminution of sneha guna (unctuousness) of kapha along with increase in ushna guna of pitta, due to which ahara parinama takes place faster leading to atyagni.

From this, it can be inferred that *ksheena doshas* contribute in causation of *Vyadhi* (Disease) in the form of *lakshanas* (clinical features).

## Eliciting dosha kshaya:

Dosha kshaya can be elicited in following ways -

When the person craves for the,

- a. samana guna bhuyishta dravyas (dravyas with properties similar to ksheena doshas).<sup>28</sup>
- b. Swayoni vardhaka dravyas (dravyas that increase the source of origin of diminished doshas).<sup>29</sup>
- c. When swakarma kshaya of doshas are observed.
- d. When virodha karma vruddhi of ksheena doshas are observed.

## Desire on food articles during dosha kshaya:

Person having *vata kshaya* will crave for *dravyas* like *Yava* (barley), *mudga* (green gram), *harenu* (peas), *ruksha bhojana* (foods dry in nature), *laghu bhojana* (foods that is light in nature), and food having *kashaya* (astringent), *katu* (pungent) *and tikta* (bitter) *rasas* etc.

Person having *pitta kshaya* will crave for *dravyas* like *tila* (seasame), *masha* (black gram), *kulatha* (horse gram), food made of *pishta anna* (dough), *mastu* (sour buttermilk), *shukta* (fermented alcoholic preparations) and *amla takra* (sour buttermilk), *dadhi* (curd) etc.

Person having *kapha kshaya* will crave for *dravyas* like Meat of *mahisha* (buffalo), *varaha* (pig), *aja* (goat), *guda* (jaggery), *ksheera* (milk), heavy food articles, desire to sleep etc. <sup>30,31</sup>.

## Dosha kshaya in the form of nidana and lakshana:

Dosha kshaya can be seen in the form of *nidana* as well as *lakshana* in patients. Ex:*Prajagara* (staying awake at night) is generally understood as *nidana* of disease, but it can be a *lakshana* of *kapha kshaya* also. So before coming to conclusion that *prajagara* as *nidana in this case*, it should be properly analysed and have to rule out for any pre existing *kapha kshaya* condition.

# Diagnosis of dosha kshaya based on nidana and upashaya:

Understanding *nidana* and *upashaya* (that gives comfort-can be *ahara*, *vihara* or *aushadha*), will help us to find the involvement of *doshas* in *vyadhis*. e.g., *Kampa* is a *lakshana* which manifests due to *vata vruddhi*. However, *kshaya* of *pitta* and *kapha* will also be present in the manifestation of *kampa*. Establishing this is possible, only when *lakshanas* of *dosha kshaya vikalpa* are understood. In *dosha kshaya vikalpa* it is stated that *kampa* can manifest in *pitta kapha kshaya* even if *vata* is in *prakruta avasta*. Such conditions can be clinically understood when *nidanas* and *upashaya* are properly traced out. From this it can be understood that, *nidanas* as well as *upashaya* play a major role in diagnosing *dosha kshaya*.

## Dosha kshaya as predisposing factor for diseases:

Ksheena doshas acts as predisposing factor for causation of diseases. e.g., rikta (snehadi guna shunyata) srotases acts as predisposing factor for causation of vatavyadhis. Similarly, hikka roga is more likely to occur in people who have ksheena prana vata.

# Dosha kshaya in differential diagnosis:

It is very important to understand the role of *ksheena doshas* in causing various diseases which would help us in achieving differential diagnosis. e.g., clinically, diagnosing *sandhigata vata* and *amavata* might be bit confusing many a times. Morning stiffness is commonly seen in many people with *amavata*, which is one of the confirmatory sign. However, it is believed that extreme rigidity or stiffness (*stambaadhikata*) can occur even in *sandhigata vata* which is due to *chala guna kshaya* of *vata*<sup>34</sup>. But in *amavata*, the stiffness might be due to presence of *ama* localised in joints. So through the *roga rogi pareeksha* understanding the *chala guna kshaya* in this case would pave the way in establishing the differential diagnosis of the above conditions.

## Dosha kshaya results in bala (strength) kshaya:

- -Relation between *vata dosha* and bala -Anupahata vata, ushma and srotas are responsible for bala.<sup>35</sup> Also vata is responsible for carrying poshaka bhaga to dhatus. So when vata kshaya happens, there might be loss of poshana to dhatus leading to dhatu bala kshaya.
- -Relation between *pitta dosha* and *bala-Pachaka pitta* is responsible for providing *bala* <sup>36</sup>. *Pachaka pitta* responsible for the proper digestion of ingested food thereby further leading to proper absorption of all essential nutrients and vitamins required for proper nourishment of all *sapta dhatus* and to strengthen our body. So, when there is *pitta kshaya*, *bala kshaya* also takes place.
- -Relation between *kapha dosha* and *bala-"Prakrutastu balam sleshma"- Kapha* in *prakruta avastha* provides *bala* to *sharira.*<sup>37</sup>

# Relation between *dosha kshaya* and *rogakartrutva* (disease causation):

Vishama doshas are capable of causing roga where vishama refers to both vruddhi and kshaya. Roga in above context has to understood as rujakartrutva, or that which is capable of producing ruja/pain. This implies that ksheena doshas are capable of causing ruja and not vyadhi as such. In the context of sharira gunas the relation between ksheena doshas and rogakartrutva can be understood.

Mainly Sharira gunas are of two types -prasada bhuta and mala bhuta, where mala bhuta are prakupita vata, prakupita pitta and prakupita kapha which are capable of causing badha to sharira. In the same context, Acharya chakrapani explains that the word "kupita" refers to both vruddhi and kshaya implying that both vruddha and ksheena doshas are equally capable of causing badha to sharira. From this, it can be interpreted that ksheena doshas can cause badha, but not roga to sharira. This can be substantiated further with reference "ksheena doshas cannot cause vyadhi as they are dusthita (weak by itself)". 39

# Conditions which mimicks dosha kshaya (Confusion in understanding dosha kshaya):

In avarana, the avruta (doshas which is obstructed by other doshas) doshas becomes weak. Hence initially decrease in functions of avruta doshas (swakarma hani) are seen which mimics like ksheena doshas.

e.g., in condition of *pittavruta vata*, where *pitta* as well as *vata* is vitiated, the symptoms of *vata kopa* cannot be very well elicited. Instead, *lakshanas* like *daha* (burning sensation), *bhrama* (giddiness), *trushna* (thirst) etc. manifests. Here *vata karma hani lakshanas* might initially manifest which may mislead the diagnosis as *dosha kshaya avastha*. In such conditions, proper *pareeksha* (examination) has to be done and *avarana* line of treatment has to be adopted as *ksheena dosha chikitsa* would further worsen the condition.

#### **CONCLUSION:**

Vishama doshas can be either vruddhi or kshaya of doshas. Vishama doshas are capable of causing roga.Roga in this context means that which is capable of producing ruja (pain). Craving for samana guna bhuyishta dravyas, swayoni vardhana dravyas, swakarma hani of doshas and virodha karma vrudhhi are the ways through which dosha kshaya can be elicited. Understanding the permutations and combinations of dosha kshaya will help us to conclude the key points in diagnosis like establishing pittakapha kshaya in manifestation of kampa, inspite of vata being prakruta. Dosha kshaya can be a predisposing factor for diseases like hikka (hiccups), vatavyadhi (Neurological diseases) etc. Dosha kshaya helps in differential diagnosis of diseases. Thus it can be concluded that, though ksheena doshas are weak, they can produce ruja, upaghata(destruction) to sharira (body), but do not possess the quality of causation of disease as they are duhsthita(weak).

## **REFERENCES:**

- 1. Kaviraj Ambika Dutta shastri, Sushrutha samhita of Maharshi Sushruta(Hindi commentary) on Ayurveda Tatvadeepika, Part 1,Sutra sthana, chapter 15, verse no.48. Varanasi; Chaukambha Sanskrit samsthan, Edition 2012;p.84.
- 2. Paradakara H.B, editor. Ashtangahrdayam composed by Vagbhata with the commentaries of Arunadatta and Hemadri, Sutrasthana; Ayushkameeya: Chapter 1, verse 45. Varanasi: Chaukhambha Orientalia, 2019; p.14.
- 3. Dr Gopikris<mark>hna</mark>. S. Acharya ,Nidana Prakasha, A textbook of Roganidana and Vikruti Vigyan, chapter 1, Definition and importance of Roganidana and vikruti Vigyan, Varanasi ;Chaukamba Prakashan; first edition:2022: p.8.
- 4. Radhakanta D., editor. Shabda kalpa druma, prathama khanda, ed:3. Delhi: Naga publishers; 2003.p.753.
- 5. Rekha Jain, Textbook of Roganidana and Vikruti Vigyana, Volume 1,Introduction, Delhi, Chaukambha Sanskrit Pratisthan; Reprint 2015:p.1-2.
- 6. Radhakanta D., editor. Shabdakalpadruma dwiteeyakhanda, ed:3. Delhi: Naga publishers; 2003.p.229.
- 7. R.Vidyanath, Charaka Samhita with Chakrapani Commentry, English translation, Volume 1, Sutrasthana, Chapter 17, Verse no.63. Varanasi; Chaukambha Prakashan, 1<sup>st</sup> Edition: 2020:p.534.
- 8. Acharya. J.T, editor, Charaka Samhita of Agnivesha with Ayurveda Dipika commentary by Chakrapanidatta, Sutrasthana: Kiyantashiraseeyama dhyayam: Chapter. 17, Verse 112. Varanasi: Chaukambha Orientelia, 2021; p105.

- 9. Dr.Bulusu Sitaram commentary on Ashtanga Hrudayam(sutrasthana) and Maulika Siddhanta(Fundamentals of Ayurveda), Chapter 11, Verse no.25. Varanasi, Chaukambha Orientalia; 2<sup>nd</sup> Edition; 2015; p.151.
- 10. Paradakara H.B, editor. Ashtangahrdayam composed by Vagbhata with the commentaries of Arunadatta and Hemadri, Sutrasthana; Doshadivijnaneeya: Chapter 11, verse 25. Varanasi: Chaukhambha Orientalia, 2019; p186.
- 11. Paradakara H.B, editor. Ashtangahrdayam composed by Vagbhata with the commentaries of Arunadatta and Hemadri, Sutrasthana; Ayushkameeyamadhyayam: Chapter 1, verse 20. Varanasi: Chaukhambha Orientalia, 2019; p14.
- 12. Acharya Y. T, Susruta Samhita of Susruta with the Nibandhasangraha commentary of Sri Dalhanacharya, Sutrasthana; Doshadhatumalakshayavrudhhivignaniya adhyaya: Chapter 15, Verse 21. Varanasi: Chaukhamba Surabharati prakashan, reprint 2017; p.73.
- 13. Paradakara H.B, editor. Ashtangahrdayam composed by Vagbhata with the commentaries of Arunadatta and Hemadri, Sutrasthana; Doshadivijnaneeya: Chapter 11, verse 43. Varanasi: Chaukhambha Orientalia, 2019; p190.
- 14. R. Vidyanath, Charaka Samhita with Chakrapani Commentry, English translation, Volume 1, Sutrasthana, Chapter 17, Verse no.62. Varanasi; Chaukambha Prakashan, 1st Edition: 2020; p.531.
- 15. R. Vidyanath, Charaka Samhita with Chakrapani Commentry, English translation, Volume 1, Sutrasthana, Chapter 17, Verse no.62. Varanasi; Chaukambha Prakashan, 1st Edition: 2020:p.532.
- 16. R. Vidyanath, Charaka Samhita with Chakrapani Commentry, English translation, Volume 1, Sutrasthana, Chapter 17, Verse no.63. Varanasi; Chaukambha Prakashan, 1st Edition: 2020: p.534.
- 17. Paraadakara shastri H. S, editor, Ashtanga sangraha of Vagbhata with the commentaries of Sarvanga sundara of Arunadatta and Ayurveda rasayana of Hemadri, Sutrasthana; Doshadivijnaneeya adhyaya: chapter 19, verse 14. Varanasi: Chaukhamba Sanskrit samsthan, 2016; p.151.
- 18. Paradakara H.B, editor. Ashtangahrdayam composed by Vagbhata with the commentaries of Arunadatta and Hemadri, Sutrasthana; Doshadivijnaneeya: Chapter 11, verse 25. Varanasi: Chaukhambha Orientalia, 2019; p186.
- 19. Acharya. J.T, editor, Charaka Samhita of Agnivesha with Ayurveda Dipika commentary by Chakrapanidatta, Sutrasthana: Kiyantashiraseeyam adhyayam: Chapter. 17, Verse 52. Varanasi: Chaukambha Orientelia, 2021; p109.
- 20. Acharya. J.T, editor, Charaka Samhita of Agnivesha with Ayurveda Dipika commentary by Chakrapanidatta, Sutrasthana: Kiyantashiraseeyamadhyayam: Chapter. 17, Verse 49 51. Varanasi: Chaukambha Orientelia, 2021; p109.
- 21. Dr. U.Krishna Muniyal,Sachitra Charaka Samhita, Volume 1, Sutrasthana,Chapter 17, Verse No.66-67.Manipal, Muniyal Ayurveda Publication; Revised Edition;2019:p.307.
- 22. Acharya Y. T, Susruta Samhita of Susruta with the Nibandhasangraha commentary of Sri Dalhanacharya, Sutrasthana; Doshadhatumalakshayavrudhhivignaniya adhyaya: Chapter 15, Verse 7. Varanasi: Chaukhamba Surabharati prakashan, reprint 2017; p68.
- 23. Paraadakara shastri H. S, editor, Ashtanga sangraha of Vagbhata with the commentaries of Sarvanga sundara of Arunadatta and Ayurveda rasayana of Hemadri, Sutrasthana; Doshadivijnaneeya adhyaya: chapter 19, verse 8. Varanasi: Chaukhamba Sanskrit samsthan, 2016; p.149.
- 24. Acharya. J.T, editor, Charaka Samhita of Agnivesha with Ayurveda Dipika commentary by Chakrapanidatta, Sutrasthana: Kiyantashiraseeyamadhyayam: Chapter. 17, Verse 43. Varanasi: Chaukambha Orientelia, 2021; p101.
- 25. Acharya Y. T, Susruta Samhita of Susruta with the Nibandhasangraha commentary of Sri Dalhanacharya, Sutrasthana; Shonitavarnaneeya adhyaya: Chapter 14, Verse 38. Varanasi: Chaukhamba Surabharati prakashan, reprint 2017; p59.
- 26. Paradakara H.B, editor. Ashtangahrdayam composed by Vagbhata with the commentaries of Arunadatta and Hemadri, Sutrasthana; Doshadivijnaneeya: Chapter 11, verse 43. Varanasi: Chaukhambha Orientalia, 2019; p190.

- 27. Acharya. J.T, editor, Charaka Samhita of Agnivesha with Ayurveda Dipika commentary by Chakrapanidatta, Chikitsasthana: Grahanidoshachikitsitam: Chapter. 15, Verse 117. Varanasi: Chaukambha Orientelia, 2021; p525.
- 28. Acharya Y. T, Susruta Samhita of Susruta with the Nibandhasangraha commentary of Sri Dalhanacharya, Sutrasthana; Doshadhatumalakshayavrudhhivignaniya adhyaya: Chapter 15, Verse 29. Varanasi: Chaukhamba Surabharati prakashan, reprint 2017; p73.
- 29. Acharya Y. T, Susruta Samhita of Susruta with the Nibandhasangraha commentary of Sri Dalhanacharya, Sutrasthana; Doshadhatumalakshayavrudhhivignaniya adhyaya: Chapter 15, Verse 29 31. Varanasi: Chaukhamba Surabharati prakashan, reprint 2017; p73.
- 30. Paradakara H.B, editor. Ashtangahrdayam composed by Vagbhata with the commentaries of Arunadatta and Hemadri, Sutrasthana; Doshadivijnaneeya: Chapter 11, verse 43. Varanasi: Chaukhambha Orientalia, 2019; p190.
- 31. Acharya Y. T, Susruta Samhita of Susruta with the Nibandhasangraha commentary of Sri Dalhanacharya, Sutrasthana; Doshadhatumalakshayavrudhhivignaniya adhyaya: Chapter 15, Verse 29 31. Varanasi: Chaukhamba Surabharati prakashan, reprint 2017; p73.
- 32. Acharya. J.T, editor, Charaka Samhita of Agnivesha with Ayurveda Dipika commentary by Chakrapanidatta, Chikitsasthana: Vatavyadhichikitsitam: Chapter. 28, Verse 18. Varanasi: Chaukambha Orientelia, 2021; p617.
- 33. Acharya. J.T, editor, Charaka Samhita of Agnivesha with Ayurveda Dipika commentary by Chakrapanidatta, Chikitsasthana: Hikkashwasachikitsitam: Chapter. 17, Verse 22. Varanasi: Chaukambha Orientelia, 2021; p533.
- 34. Tripathi Brahmananda, Editor. Madhava Nidanam by Madhavakara, Vimala Madhudara Hindi commentary & Notes, Nidanasthana: Vatavyadhinidana: Chapter 22, verse 21Varanasi: Chaukambha surbharati prakashan; p520.
- 35. Acharya. J.T, editor, Charaka Samhita of Agnivesha with Ayurveda Dipika commentary by Chakrapanidatta, Sutrasthana: Vividhaashitapeeteeyamadhyayam: Chapter. 28, Verse 3. Varanasi: Chaukambha Orientelia, 2021; p174.
- 36. Paradakara H.B, editor. Ashtangahrdayam composed by Vagbhata with the commentaries of Arunadatta and Hemadri, Sutrasthana; Doshabhedeeyadhyayam: Chapter 12, verse 12. Varanasi: Chaukhambha Orientalia, 2019; p193.
- 37. Acharya. J.T, editor, Charaka Samhita of Agnivesha with Ayurveda Dipika commentary by Chakrapanidatta, Sutrasthana: Keeyantashiraseeyamadhyayam: Chapter. 17, Verse 117. Varanasi: Chaukambha Orientelia, 2021; p105.
- 38. Acharya. J.T, editor, Charaka Samhita of Agnivesha with Ayurveda Dipika commentary by Chakrapanidatta, Sharirasthana: Shariravichayam shaareeram: Chapter. 6, Verse 17. Varanasi: Chaukambha Orientelia, 2021; p333.
- 39. Acharya. J.T, editor, Charaka Samhita of Agnivesha with Ayurveda Dipika commentary by Chakrapanidatta, Sutrasthana: Keeyantashiraseeyamadhyayam: Chapter. 17, Verse 117. Varanasi: Chaukambha Orientelia, 2021; p102.