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Cross-Sectional Study: Assessment Of Manasa Sadanam By Satva Pariksha Among Population Suffering From Vataja-Grahani Attending O.P.D At Kolkata

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Abstract

Satva Pariksha means examination of mind. It include examination of mind status, mind strength, mental endurance and analysis of weak and strong mind in the patients. In a disease found frequently in the clinics presenting the symptoms of anxiety, tension, fear, insomnia, poor memory and depressed mood etc. This features in some extent correlates the symptomatology of Depression. In the treatise of Ayurveda during description of pathogenesis of Grahani roga, it is mentioned that dysfunction of grahani nadi is the main causative factor for origin of the disease. Satva Pariksha will be done in those selected cases, who are satisfying the subjective and objective criteria of *Vataja Grahani*. A total of 90 patients treated at OPD and IPD Level from 2022-24 for restoration of their health. On the basis of scoring of Satva (Psyche) under Qualities of Satva Sara Purusa, the result obtained as above i.e., SD \pm 2.45, SE \pm 0.447, 't' = 15.21 which shows 'p' value 0.001. It has been evaluated that *Satva* indicates mental strength of an individual. Person with Pravara satva can tolerate serious diseased condition without much difficulty. As a result there are three groups of people based on how well, mediocrely, or poorly they can use their mental skills. Superior type mental faculties are characterized by the following traits:- excellent memory, devotion, gratitude, wisdom, purity, excessive enthusiasm, skill, courage, valour, fighting, absence of sorrow, proper gait, depth of wisdom, sincerity in actions, and virtuous deeds are among the traits of individuals with superior type mental faculties.

Key words: *Vataja-Grahani*, *Manasa sadanam*, *Satva pariksha*.

Introduction:

Manasa sadanam is a characteristic of Vataja Grahani that has been referenced in the classics of Ayurveda. The transformation of physical illnesses into psychological ones and vice versa is seen in the Ayurvedic treatise [1]. Satva Pariksha [2] will confirm the degree of Manas-sadanam in the chosen patients. In the recent era, the term Manasa sadanam is classified as depression and anxiety. Incidence of anxiety and depression in irritable bowel syndrome is reported by some authority. It had been reported that among the patients at O.P.D. and I.P.D Level, Prevalence of Anxiety was 44 % and depression was 84 %.. A drug combating disease will be given along with a Medhya Rasayan. Hence, the study will be framed in a group. A routine counselling will be done in a group. To describe the appraisal in *Chikitsa* and the concept of Satva Pariksha, as well as to ascertain the frequency of patients Aaswasana [3], i.e., assurance will be given on a regular basis.

These are the ideas behind *Grahani Dosha*, *Grahani Roga* and *Grahani Gada*:

While describing the ailment as *Grahani gada*, *Acharya Caraka* used the name *Grahani dosa* in the chapter's nomenclature. *Acharya Chakrapani* explains the particular rationale behind this kind of description ^[4]. The term "*Grahani dosa*" implies the malfunctioning of *agni*. The *agni* is primarily located in the *grahani*. In the title of the chapter, no distinction is made between the '*aashraya*' (the substratum i.e. *Grahani*) & '*aashrayee*' (the substance i.e. Agni). Thus '*Agnidosa*' is implied by the term '*Grahani dosa*'; though in a secondary sense; *Grahani dosa* initiates *Grahani Roga*. *Acharya Caraka* described; the way of formation of

Grahani roga. Durbala Agni brings about vidaha (a part of which is digested the other part remaining without digestion) of aahar; which moves upwards & downwards in gastro-intestinal tract. Grahanigada is the circumstance when the aahara rasa goes downward with the pakva (digested food) and apakva (undigested food) [5].

The idea behind Manasa-sadanam:

In relation to Vataja Grahani, the term "Manasa sadanam" is referenced in the Charak Samhita [6]. According to Vijaya Rakshit [7], "Mansa sadanam" is defined as "Avasada," an aberrant mental state that has recently been related to the symptoms of mental depression. Hence in chronic case of *Vataja* Grahani along with somatic disorders also the psychological condition get disturbed. Ava-sāda, as, m. sinking (as of a chair), Susr.; the growing faint (as of a sound), ib.; failing, ex- Chaustion, fatigue, lassitude, ib.; defeat, Malav.; want of energy or spirit (especially as proceeding from doubtful or unsuccessful love), L.; (in law) badness of a cause, L.; end, termination, L.; (cf. nir-av.) [8]. Mind is a factor for receiving happiness and sadness in an individual. The word sadan suggests "Avasada" [9] meaning the clinical manifestation of depression. This hridaya is also connected with dasha mahamula dhamani through which the doshas pervade the heart. Hence, there is exchange of mind & dosha. The mind is affected when doshas become excessively vitiated, and vice versa [10]

Methodology: In the present study the patients of *Vataja grahani* will be selected following the subjective criteria of *Vataja Grahani*. Those selected patients will be subjected for pathological examination of Stool i.e.; R/E and M/E of stool.

The selected patients of *Vataja Grahani* with altered stool will be *interogated* for *Manasa sadanam* with some specific questionnaires. *Satva Pariksha* will be done in those selected cases. Patients those who are satisfying the subjective and objective criteria of *Vataja Grahani* and *Manasa sadanam*.

Inclusion criteria:-

- i. Subjects of either sex between 12 60 Years of age.
- ii. Presence of cardinal sign and symptoms of Vatajagrahani with Manassadanam.
- iii. Patients presenting altered L.F.T, Sr. Amylase, Sr. Lipase.
- iv. Patients presenting altered R/E & M/E of stool.
- v. Patient satisfying the minimum criteria of HAM-A & HAM-D.
- vi. Willingness to give written consent to participate in the study.
- vii. Patients those who are not receiving any other therapies except research medicine.

Exclusion criteria:-

- Any malignant condition regarding colon disease.
- ii. Any systemic failure like Renal failure, Hepatic failure etc.
- iii. Any tubercular condition of colon.
- iv. Tropical pancreatitis or any pancreatic disease.
- v. Pregnancy
- vi. Co-existing chronic diseases.
- vii. Any other treatment related to this disease.

Manasa sadanam sequences psychological parameter in Vataja Grahani:

Patients with *Vataja Grahani* exhibit "*Avasada*" as evidenced by the very remark of *Caraka Samhita* in

"Mansa-sadanam" [11]. According to different Acharyas, the following different causative factors of Avasada in Vataja Grahani is mentioned as follows:-

- 1. According to the *Charaka Samhita*, *Prajnaparadha*, *Parinama*, and *Asatmedriyaartha Samyoga* are thought to be the general causes of all illnesses ^[12]. Among these etiological triad *Prajnaparadha* is very specific in the causation of "*Avasada*" in *Vataja grahani* patient.
- 2. According to Maharsi Charaka; vitiation of manasika dosas viz Raja dosa and Tamo dosa.
- 3. According to *Maharsi Charak*, the causes of *Manovikara* are the acquisition of undesirable items and the loss or non-acquisition of desired ones [13].
- 4. According to Maharsi Susrutha, the causes of Mano-vikara are Manobhavas, which include Krodha, Soka, Bhaya, Harsa, Visada, and Irshya among others [14].
- 5. Besides above causes According to *Maharisi Charaka*, *Avar Satwa* (weak psyche) has also been *recognised* as a necessary predisposing factor for the manifestation of *Avasada* in *vataja grahani* patients.

Being associated with the soul, the mind, or *satva* governs the body. They are classified as exceptional (*Pravara*), mediocre (*Madhyama*), or inferior (*Avara*) based on their level of strength. They are vulnerable to ego, delusion, fear, sadness, and greed. They disintegrate even when stones depict scenes of rage, fear, hostility, terror, and ugliness, or when they depict images of human or animal flesh or blood ^[15]. People who possess "*Avar Satva*" are impacted by *Manovikara* ^[16], or

"Avasada" in Vataia Grahani. other words, persons with high rajas and tamas and Avar satva, if comes in contact with the causes of Raja & Tama became sufferer and this leads to recollection of fearful and negative or disturbing memories along with false perceptions, wrong recognition, failure to restrain from negative memories and thoughts. When the consequences of Manasa sadanam occurs in the patient of Vataja Grahani; then it should be assumed that the *Vataja Grahani* Roga is along with Avasada. In both the disease, the main responsible factor for initiation of pathogenesis is *Agnimandya*. The *srota* towards the various directions of the system containing the Rasadi dhatus gradually get obstructed with the ama. According to Maharsi Charak; Hrdaya is a seat of rasa, vatadi, satvas, buddhi, indriya, atma and ojus also emphasize that the seat of 'Antaramana' is Hridaya. According to Maharsi Charak, Hrdaya is home to Dasa Mahamoola dhamanis, Prana, Apana, Mana, Buddhi, Chetana, and Mahabhutani in the context of Trimarmiya [17].

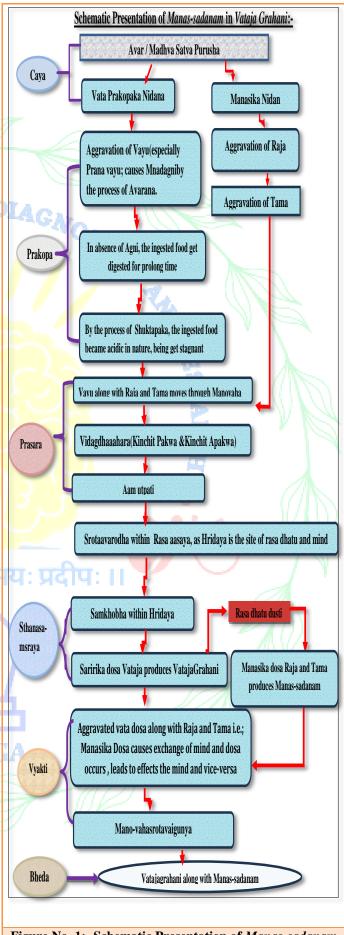


Figure No. 1:- Schematic Presentation of Manas-sadanam in Vataja Grahani

Satva Pariksha [18]:-

1. Smriti (Memory):

(Question). In the recent past, recognition of any events?

- Was well memorised (*Pravara Satva*)
- Could be memorised with some support from the family and/or friends (*Madhyama Satva*)
- Poor memory (*Avara Satva*)

2. Bhakti (Devotion)

(Question). How satisfied are you with capacity for work?

- Very satisfied— (*Pravara Satva*)
- Neither satisfied nor dissatisfied (Madhyama Satva)
- Very dissatisfied (*Avara Satva*)

3. Krtajna (Gratefulness)

(Question). How satisfied are you with the support you get from your friends or, with your access to health services or, with your personal relationships?

- Very Satisfied—(*Pravara Satva*)
- Neither satisfied nor dissatisfied (Madhyama Satva)
- Very dissatisfied (*Avara Satva*)

4. Prajna (Intelligence)

(Question). How satisfied are you with your ability of judgement capacity towards right or wrong work?

- Very Satisfied—(*Pravara Satva*)
- Neither satisfied nor dissatisfied (Madhyama Satva)
- Very dissatisfied (*Avara Satva*)

5. Suci (Hygiene)

(Question). How satisfied are you with your ability to perform daily living activities like bathing, wearing clothes, brushing, combing etc.

?

CRNAL OF

- Very Satisfied— (*Pravara Satva*)
- Neither satisfied nor dissatisfied (Madhyama
 Satva)
- Very dissatisfied (Avara Satva)

6. Utsaha (Enthusiasm)

(Question). How much do you enjoy life?

- An extreme amount— (*Pravara Satva*)
- A moderate amount (*Madhyama Satva*)
- Not at all (Avara Satva)

7. Daksha (Skill)

(Question). How satisfied are you with your ability to perform work?

- Very Satisfied— (*Pravara Satva*)
- Neither satisfied nor dissatisfied (Madhyama Satva)
- Very dissatisfied (*Avara Satva*)

8. *Dhira* (Patience)

(Question). Are you hopeful about your future?

- Always– (*Pravara Satva*)
- Sometimes (*Madhyama Satva*)
- Never (Avara Satva)

9. Vikrama (Valour)

(Question). How often do you have negative feelings such as blue mood, despair, anxiety and depression?

- Quiet Never– (*Pravara Satva*)
- often (*Madhyama Satva*)
- Always (*Avara Satva*)

10. Tayakta Visada (Sorrow Tolerance Capacity) (Question). In the recent past, any event of crisis like

- Loss of family member/close friend.
- Loss of money/loss in business.
- Severe deterioration in health of self or a loved one.

How satisfied are you with your sorrow tolerance capacity?

- Was well tolerated (*Pravara Satva*)
- Could be tolerated with some support from the family and/or friends (*Madhyama Satva*)
- Was inconsolable (*Avara Satva*)

11. Gati (Mobility)

(Question). Can you walk 100 yards?

- Fast without stopping (*Pravara Satva*)
- Only with help (*Madhyama Satva*)
- Impossible (*Avara Satva*)

12. Gambhir Buddhi (Depth Of Wisdom)
(Question). Are you in good spirits most of the day?

- Always (*Pravara Satva*)
- Sometimes (*Madhyama Satva*)
- Never (*Avara Satva*)
- 13. Chesta Yukta (Sincerity)

(Question). How satisfied are you with your Capacity for work?

- Very satisfied (*Pravara Satva*)
- Neither satisfied nor dissatisfied—(Madhyama Satva)
- Very dissatisfied (*Avara Satva*)

14. Kalyana Abhinivista (Virtuous Act)

during the last 3 months?

- ☐ Once a week or more (*Pravara Satva*)
- ☐ Less than once a month (*Madhyama Satva*)
- ☐ Never (Avara Satva)

(Question). How often did you participate in social activities like charity, social gatherings etc.

15. Vedna Sahisnuta (Pain Intolerance)

(Question). To what extent do you feel that physical pain prevents you from doing what you need to do?

- Not at all (Pravara Satva)
- A moderate amount (*Madhyama Satva*)
- An extreme amount (*Avara Satva*)

Assessment of satva/psyche :-

To assess the psychological status grading of above questionnaires, on the basis of *follwing* scoring by sum the score from the first 15 items as score 0 for *Pravara Satva*, score 1 for Madhya *Satva* and score 2 for *Avara Satva*; range of total score of *satva* are as written below:-

- ♣ *Pravara Satva* [19] = 0 6
- **♣** Madhyama Satva ^[20] = 7 22
- **♣** Avara Satva ^[21] > 22

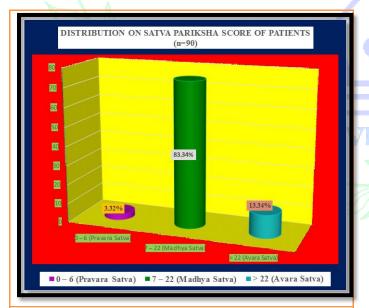
Importance :- According to *Acharya Charaka*, by observing the body of diseased person a physician may confuse as because some people having a small sized and emaciated body are seen to be strong. They are like ants who have a small body

and look emaciated but can carry a too much heavy load ^[22].

Table No. 1:- Shows the *Satva Pariksha* Score of 90 patients of *Vataja Grahani*.

Sl.	Satva	No. of	Percentage
No.	Pariksha	patients	(%)
	Score		
1.	0-6	03	3.32%
	(Pravara		
	Satva)		
2.	7 – 22	75	83.34%
	(Madhya	70.	
	Satva)	₹	
3.	> 22 (Avara	12	13.34%
	Satva)		

Table No. 1: Shows that the assessment of psychological status i.e.; mind strength, mental endurance and analysis of weak and strong mind was found in the range of 83.34% patients suffering from mediocre psyche symptoms i.e.; Madhya *satva*, 13.32% patients suffering from inferior psyche symptoms i.e.; *Avara satva* and 3.32% patients.



Graph No. 1: Shows the psychological status i.e., mind strength, mental endurance, and analysis of weak and strong mind symptoms in 90 patients of *Vataja Grahani*.

Psychiatric co morbidity: Psychiatric disorders, such as anxiety disorders, depression are more common in patients with IBS; even mildly symptomatic patients. However, stress plays an important role in exacerbating IBS symptoms in IBS patients. In depression; the Hypothalamicpituitary adrenal axis is hyperactive, as evidenced by a non-suppressed response to the dexamethasone suppressor test. Major depressive disorder is characterized by one or more episodes of idiopathic major depressive syndromes such as Depressed mood, Irritability, Anxiety, Loss of interest or Worthlessness, Guilt, Hopelessness, pleasure, Helplessness, Thought of suicide, Change in appetite or weight, Change in sleep, Decreased libido, Trouble concentrating, Diurnal variation, Ruminative thinking, Somatoform symptoms, Psychotic symptoms. Many be of the anxiety disorders may be understood as inappropriate triggering of the stress response system, which is commonly referred to the "Fight or Fright" response [23]

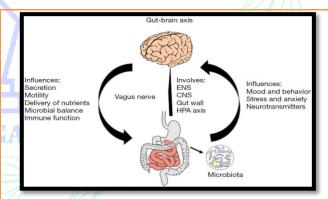


Figure No. 1:- The gut-brain axis. The vagus nerve provides a link between the gut and the brain. This connection involves the ENS, the CNS, the gut wall at the periphery, and the HPA axis. Alterations in the gut microbiota can influence mood, behavior, stress, anxiety, and neurotransmitters. Imbalance of the gut microbiota affects the signals sent by the gut to the brain, resulting in alterations in secretion, motility, nutrient delivery, microbial balance, and immune function. Together, these disruptions contribute to IBS symptoms. ENS, enteric nervous system; CNS, central nervous system; HPA, hypothalamopituitary-adrenal; IBS, irritable bowel syndrome.

Effect Of Drug By Assessment Of Satva / Psyche: - Paired' test is done in individually to assess the therapeutic efficacy of the drugs. Before treatment (BT) and After treatment (AT) results of Satva/Psyche

by assessment of the psychological status grading of Qualities of Satva Sara Purusa.

Table No. 2: Shows BT & AT results (Paired 't' test) of *Satva* (Psyche) are taken as assessment criteria and the result of the same are computed as below of patients of *Vataja Grahani*: -

Sl.	Satva	Me	ean	S.	S.E.	't'-	'P'-
N	Pariks	Score		D.	M	Val	Valu
0.	ha	В	A	Ÿ		ue	e
1		T	T				1
1.	Satva	39	18	2.4	0.44	15.2	<0.0
M	Bala	1	8	5	7	1	01

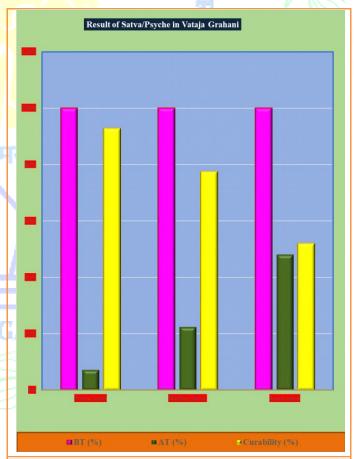
The above table shows that after computation of paired 't' test in the sample of Group A that is experimental Group. On the basis of scoring of *Satva* (Psyche) under Qualities of *Satva* Sara *Purusa*, the result obtained as above i.e., $SD \pm 2.45$, $SE \pm 0.447$, 't' = 15.21 which shows 'p' value 0.001. This obtained result reveals that obtained result is highly significant. Hence, it could be interpreted that Drug used is very much significant in the sample after comparing with the P value chart [24].

Effect Of Drug On Satva/Psyche:

Drug effect was evaluated by the percentage relief of *Satva*/Psyche mentioned under *Lakshan* of *Satva* Sara *Purusha* before and after treatment.

Sl.	Types of	BT	AT (%)	Curability
No.	Satva	(%)		(%)
1	Pravar Satva	100%	7.23%	92.83%
2.	Madhya Satva	100%	22.51%	77.49%
DIA	Avara Satva	100%	48.08%	51.92%

Table No. 3: Shows the effect of Drug which revealed that 92.83% curability was achieved in *Pravara Satva* Patients, 77.49% curability was achieved in *Madhyam Satva* and 51.92% curability was achieved in *Avara Satva* Patients in *Vataja Grahani*.



Graph No. 1: Shows the psychological status i.e., mind strength, mental endurance, and analysis of weak and strong mind symptoms in 90 patients of *Vataja Grahani*.

Results: A total of 90 patients treated at OPD and IPD Level from 2022-24 for restoration of their health. On the basis of scoring of *Satva* (Psyche) under Qualities of *Satva* Sara *Purusa*, the result obtained as above i.e., SD \pm 2.45, SE \pm 0.447, 't' = 15.21 which shows 'p' value 0.001. This obtained result reveals that obtained result is highly significant. Hence, it could be interpreted that drug is very much significant in the taken sample after comparing with the P value chart.

Discussion:

Shows the effect of Drug which revealed that 92.83 % curability was achieved in *Pravara Satva* Patients 77.49 % curability was achieved in *Madhyam Satva* and 51.92 % curability was achieved in *Avara Satva* Patients in *Vataja Grahani*. Previously, it has been mentioned that *Satva* indicates mental strength of an individual. Person with *Pravara satva* can tolerate serious diseased condition without much difficulty.

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References:

 R. K. Sharma, Bhagwan Dash, Charak Samhita, Chowkhambha Sanskrit Series Office, Varanasi, Volume II, Indriya Sthana, Edition Reprint 2018, Chapter 5, Sloke no. 41, Page no. 580.

- R. K. Sharma, Bhagwan Dash, Charak Samhita, Chowkhambha Sanskrit Series Office, Varanasi, Volume II, Edition Reprint 2012, Chapter 8, Sloke no. 110, Page no. 270.
- 3. R. K. Sharma, Bhagwan Dash, Charak Samhita, Chowkhambha Sanskrit Series Office, Varanasi, Volume IV, Edition Reprint 2017, Chapter 19, Sloke no. 12, Page no. 215.
- 4. Acharya Vaidya Jadavji Trikamji; Carak Samhita by Agnivesa revised by Carak & Drirabala with the Ayurveda Dipika Commentary of Chakrapani Dutta: Varanasi: Chaukhamba Publications; Edition: Reprint, 2018, Chikitsa sthan, Chapter 15/01,02, Page-512.
- Acharya Vaidya Jadavji Trikamji; Carak Samhita by Agnivesa revised by Carak & Drirabala with the Ayurveda Dipika Commentary of Chakrapani Dutta: Varanasi: Chaukhamba Publications; Edition: Reprint, 2018, Chikitsa sthan, Chapter 15/51,52, Page-517.
- Acharya Vaidya Jadavji Trikamji; Carak Samhita by Agnivesa revised by Carak & Drirabala with the Ayurveda Dipika Commentary of Chakrapani Dutta: Varanasi: Chaukhamba Publications; Edition: Reprint, 2018, Chikitsasthan, Chapter - 15/60-64, Page-518.
- 7. Prof. K.R.Srikanta Murthy, Madhava Nidanam (Roga Viniscaya) of Madhava Kara (A treatise on Ayurveda) Text with English translation, critical introduction and appendix, Chowkhamba Orientalia Varanasi, Reprint

edition : 2016, Part -1 , Chapter -4, Page no. 20-21.

- 8. Sir Monier Monier Williams; A Sanskrit English Dictionary Etymologically and Philologically Arranged with Special reference to Cognate Indo-European Languages, New Edition, Greatly enlarged and improved, Motilal Banarsidass Publishers Private Limited , Edition: 1999, Page No. 105.
- 9. Prof. Yadunandan Upadhaya, Madhavnidanam of Sri Madhav Kar with Madhukosa SanskritCommentary by Sri Vijay Rakshit & Srikantha Dutta, Chowkhamba Prakashan, Varanasi, Vol. 1, Edition: Reprinted: 2008, Chapter 04/08, Page No. -185.
- 10. Acharya Vaidya Jadavji Trikamji; Carak Samhita by Agnivesa revised by Carak & Drirabala with the Ayurveda Dipika Commentary of Chakrapani Dutta: Varanasi: Chaukhamba Publications; Edition: Reprint, 2018, Indriya sthan, Chapter 05/41, 42, Page-363.
- 11. Acharya Vaidya Jadavji Trikamji; Carak Samhita by Agnivesa revised by Carak & Drirabala with the Ayurveda Dipika Commentary of Chakrapani Dutta: Varanasi: Chaukhamba Prakashan; Edition : Reprint, 2013, Chikitsa sthana, Chapter 15/60-64, Page- 518.
- 12. Acharya Vaidya Jadavji Trikamji; Carak Samhita by Agnivesa revised by Carak & Drirabala with the Ayurveda Dipika Commentary of Chakrapani Dutta: Varanasi: Chaukhamba Prakashan; Edition: Reprint,

- 2013, Nidanasthan, Chapter 1/3, Page- 193-194.
- 13. Acharya Vaidya Jadavji Trikamji; Carak Samhita by Agnivesa revised by Carak & Drirabala with the Ayurveda Dipika Commentary of Chakrapani Dutta: Varanasi: Chaukhamba Prakashan; Edition : Reprint, 2013, Sutra sthan, Chapter 1/57, Page- 16.
- 14. Acharya Vaidya Jadavji Trikamji; Carak Samhita by Agnivesa revised by Carak & Drirabala with the Ayurveda Dipika Commentary of Chakrapani Dutta: Varanasi: Chaukhamba Prakashan; Edition: Reprint, 2013, Chikitsasthan, Chapter 9/85-86, Page 474.
- 15. Acharya Vaidya Jadavji Trikamji; Carak Samhita by Agnivesa revised by Carak & Drirabala with the Ayurveda Dipika Commentary of Chakrapani Dutta:
 Varanasi: Chaukhamba Prakashan; Edition: Reprint, 2013, Vimansthan, Chapter 8/119, Page279-280.
- 16. Acharya Vaidya Jadavji Trikamji; Carak Samhita by Agnivesa revised by Carak & Drirabala with the Ayurveda Dipika Commentary of Chakrapani Dutta: Varanasi: Chaukhamba Prakashan; Edition: Reprint, 2013, Chikitsasthan, Chapter 9/5, Page- 468.
- 17. Acharya Vaidya Jadavji Trikamji; Carak Samhita by Agnivesa revised by Carak & Drirabala with the Ayurveda Dipika Commentary of Chakrapani Dutta:

Varanasi: Chaukhamba Prakashan; Edition: Reprint, 2013, Sutrasthan, Chapter - 30/3-8, Page- 183- 185.

- 18. Acharya Vaidya Jadavji Trikamji; Carak Samhita by Agnivesa revised by Carak & Drirabala with the Ayurveda Dipika Commentary of Chakrapani Dutta: Varanasi: Chaukhamba Prakashan; Edition: Reprint, 2018, Vimana sthana, Chapter 8/110, Page- 278.
- 19. Acharya Vaidya Jadavji Trikamji; Carak Samhita by Agnivesa revised by Carak & Drirabala with the Ayurveda Dipika Commentary of Chakrapani Dutta: Varanasi: Chaukhamba Prakashan; Edition: Reprint, 2018, Vimana sthana, Chapter 8/111, Page- 278.
- 20. Acharya Vaidya Jadavji Trikamji; Carak Samhita by Agnivesa revised by Carak & Drirabala with the Ayurveda Dipika Commentary of Chakrapani Dutta: Varanasi: Chaukhamba Prakashan; Edition: Reprint, 2018, Vimana sthana, Chapter -8/113, Page- 278.
- 21. Acharya Vaidya Jadavji Trikamji; Carak Samhita by Agnivesa revised by Carak & Drirabala with the Ayurveda Dipika Commentary of Chakrapani Dutta: Varanasi: Chaukhamba Prakashan; Edition: Reprint, 2018, Vimana sthana, Chapter 8/112, Page- 278.
- 22. Acharya Vaidya Jadavji Trikamji; Carak Samhita by Agnivesa revised by Carak &

- Drirabala with the Ayurveda Dipika Commentary of Chakrapani Dutta: Varanasi: Chaukhamba Prakashan; Edition: Reprint, 2018, Vimana sthana, Chapter 8/115, Page- 278.
- 23. Lee Gold Man, Andrew L. Schafer; Gold Man's Cecil Medicine, Arend Armitage
 Clemmon's Drazen Criggs Landry Levinson
 Rustgi Scheld, Elsevier Saunders, Chapter 139. Page no. 869.
- 24. Bratati Banerjee, Mahajan's Methods in Biostatics for Medical Students and Research Workers, Jaypee Brothers Medical Publishers (P) LTD, New Delhi, India, Edition -9th, 2018, Page- 450.

ISSN: 2584-2757

DOI: 10.5281/zenodo.16032243

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