

EFFECT OF VATA DOSHA ON INTELLIGENCE QUOTIENT AND EMOTIONAL QUOTIENT

ABSTRACT

According to *Ayurveda* the whole life processes are governed by the *Tridosha* i.e. *Vata, Pitta and Kapha*. *Vata Dosha* has been given prime importance because it is the primary force that motivates and mediates other *Dosha, Dhatu* and *Mala* for performing their functions in the body. *Vata Dosha* possesses various *Guna*. Based on such *Guna* it performs different *Karma* in the body. *Vata* control motor as well as sensory functions. It is a self-generating and self-propagating energy responsible for the regulation of almost all the activities in our body. It should be considered as an invisible force that is recognised through its functions. This paper aims at understanding the effect of *Vata Dosha* on Intelligence Quotient and Emotional Quotient. The word quotient means amount of a specified quality or characteristic. The characteristics of individuals are developed on the predominance of *Dosha* during intra-uterine life and it is mentioned in classical textbooks in *Prakruti* concepts. In the formation and maintenance of *Deha Prakruti* and *Manasa Prakruti* the role of *Dosha* is inevitable. Among the five types of *Vata, Prana* is responsible for controlling the functions of *Buddhi* and *Manas*, while *Udana* helps in recalling the past experiences.

Key words: *Tridosha, Guna, Vata, Intelligence Quotient, Emotional Quotient and Medha.*

INTRODUCTION

Tridosha theory (the theory regarding three humours –*Vata, Pitta, and Kapha*) forms one of the most important foundations of *Ayurveda*. The science of *Ayush* (life), accepted various philosophical views such as *Panchamahabhoota Siddhanta* (1) (theory regarding all five fundamental entities), *Karya-Karana Siddhanta* (2) (theory regarding facts and causes), *Tridosha Siddhanta* (3) (theory regarding three humours), *Srushti Utpatti Krama* (4) (the process of evolution of universe), concept of *Chikitsadhishthita Purusha* (5) (living being

comprises all five fundamental entities), *Atma* (6) (the soul), *Indriya* (sense organs), *Manas* (7) (mind) and so on. The ultimate aim of the science is to keep the *Shareerika* (8) and *Manasika Dosha* (9) (somatic and psychic humours) in a state of equilibrium by maintaining the level of *Agni* (digestive enzymes), clearing the *Srotas* (10) (channels) for the formation of sufficient quantity of *Dhatu*, and *Upadhatu* (11) (tissues) for the formation and excretion of *Mala* (12) (waste materials). All the above factors coordinate together to balance the physical and mental health of an individual. According to *Acharya* (scholars of *Ayurvedic* science) the whole life processes are governed by the three *Shareera Dosha* (somatic humours) such as *Vata*, *Pitta* and *Kapha*. These *Tridosha*, in their equilibrium state regulate almost all physiological processes in the body. (13) The ultimate aim of the science is to keep the *Shareerika* and *Manasika Dosha* (14) in a state of equilibrium.

AIM AND OBJECTIVE

To study the influence of *Vata* on Intelligence quotient and Emotional quotient.

MATERIALS AND METHODS

Available relevant *Ayurvedic* physiology textbooks, *Samhita* (classical text books) are referred to gather more information about *Vata Dosha* and its various functions in the body.

LITERARY REVIEW

Dosha

Panchamahabhoota Siddhanta ⁽¹⁵⁾ is the most accepted principle in *Ayurvedic* science since *Panchamahabhoota* (five subtle elements) forms the atomic or molecular basis of a *Dravya*. With the help of this *Siddhanta* (theory), the evolution of Universe, *Nirmana* (formation) of *Dosha*, *Dhatu*, *Mala* and *Shareera* ⁽¹⁶⁾ was explained elaborately.

Dosha is considered to be a physiological entity that possess group of qualities inherently present in the body. They possess certain *Guna* (properties), so able to do specific *Karma* (functions) ⁽¹⁷⁾ as well as govern the developments of various structures in the body. The *Tridosha* forms the *Moola of Shareera* ⁽¹⁸⁾ (root factors for the formation and functions of a living body). For *Garbha* formation and its developments, *Shareerika-Manasika Prakruti Nirmana* ⁽¹⁹⁾ for the regulation and normal metabolic functions *Dosha* play major role. Based on their *Sthana* and *Karma* (location and functions) each *Dosha* is again classified into various types. *Tridosha* provide full supports to the body and mind like a dwelling house

supported by pillars or *Sthuna*. Hence known as *Tristhuna*.⁽²⁰⁾

Dosha and Psychological Factors

Vata Dosha⁽²¹⁾ possesses different qualities like *Laghu Guna* (lightness), *Chala Guna* (mobility), *Anavasthitatwa* (instability), *Sukshma Guna* (penetrating power), *Yogavahitwa*⁽²²⁾ and so on. Based on different such *Guna*, *Vata* could perform various functions within our body.

From the different subtypes of *Vata*, the *Prana Vata*⁽²³⁾ though located mainly in *Moordha* (head and neck), travels through the thoracic region and control the activities of *Indriya*, *Manas*, and *Buddhi*. The *Sukshma Guna* of *Prana Vata* enable it to reach the subatomic levels of *Manas*, *Indriya*, *Buddhi* and through its connection with sense organs and organs in the thoracic region, perform its functions like appreciation of senses, inhalation, sneezing, spitting, deglutition processes, peristaltic movements, absorption, circulation, thereby proved its role in digestive function and respiratory functions.

Vata Dosha also has influence on one's psychological feelings or emotions. Its presence can be inferred from the words *Utsaaha* (enthusiasm), *Harsha* (happiness) and so on.⁽²⁴⁾ *Acharya Charaka* mentioned that *Vata* controls all the activities of *Indriya*⁽²⁵⁾ both sense organs and Motor organs, carries the impulses of all sense objects, control the areas of speech and articulation. ***Vata takes the control of various activities in brain and spinal cord there by proves its presence in central nervous system.***

Among the *Pitta Dosha*, the *Sadhaka Pitta* located in *Hrudaya*, is considered to be the chief regulator of *Buddhi*.⁽²⁶⁾ Among *Kapha Dosha*, *Tarpaka Kapha* located in *Shiras* (head), *Avalambaka Kapha*⁽²⁷⁾ located in *Uras* (thorax), **are considered to be the main coordinators for proper analysis of knowledge or *Buddhi*.**

Smruti , Buddhi and Medha

Smruti is the remembrance of things directly perceived, heard or experienced earlier. *Smruti* has a prominent role in the perception of *Buddhi* (intelligence). It is more related with *Buddhi* and *Manovyapaara* (coordinates the action of mind).⁽²⁸⁾ In *Shabdakalpadruma*, *Buddhi* means cognizance or understanding power. *Buddhi* is responsible for conclusive knowledge.⁽²⁹⁾

According to *Chakrapani*, *Buddhi* gives an initiation to work and to come to final conclusion after proper analysis. It is the experience or knowledge that got after proper analysis.⁽³⁰⁾ *Acharya* mentioned *Medha*, *Mati*, *Prajna*, *Buddhi*, *Jnana* are used as synonyms.

According to *Dalhana*, coming to the final conclusion after proper reasoning and logic is by means of *Buddhi* only.⁽³¹⁾

In *non-Ayurvedic Sanskrit* literature, the meaning of *Medha* is the retention power of intellect or the knowledge which is retained for longer periods. In *Ayurvedic* literature, *Medha* is defined as the ability of retention of knowledge gained through literary source.⁽³²⁾

According to *Dalhana*, *Medha* is a variety of *Buddhi* which acquires complete, uninterrupted, minute and deep knowledge for a longer period. Due to *Medha* a person will be able to obtain the knowledge of existing objects and hence person becomes learned.⁽³³⁾

According to *Arunadutta*, *Medha* is a variety of *Buddhi*. It is the retention power of knowledge of an individual.⁽³⁴⁾

In nutshell it could be concluded that *Medha* is the is the retention power of knowledge which is acquired through *Buddhi* (experiences or knowledge that got after proper analysis); *Smruti* is the power to remember or to recalls the retained knowledge or *Buddhi*⁽³⁵⁾ whenever it is needed.

Intelligence Quotient (IQ)³⁶

"Intelligence is the capacity to acquire capacity." (Woodrow, 1921). Wechsler (1944) states that the "intelligence is an aggregate or global capacity of an individual to act purposefully to think rationally and to deal effectively with his environment." IQ is a gross effect of cerebral, cultural and emotional status as agreed by most of the clinical psychologists in present era. IQ classification includes labels such as "superior" or "average."

Emotional Quotient (EQ)³⁷

Emotional intelligence (emotional quotient or EQ) is the ability to understand, use, and manage your own emotions in positive ways to relieve stress, communicate effectively, empathize with others, overcome challenges and defuse conflict.

Emotional intelligence is generally defined by four attributes:

1. **Self-management** – Ability to control impulsive feelings and behaviors, manage emotions in healthy ways, take initiative, follow through on commitments, and adapt to changing circumstances.

2. **Self-awareness** – Recognizing own emotions and how can they affect one's thoughts and behavior. One knows his or her strengths and weaknesses, and has self-confidence.
3. **Social awareness** – One has empathy. He/ She can understand the emotions, needs, and concerns of other people, pick up on emotional cues, feel comfortable socially, and recognize the power dynamics in a group or organization.
4. **Relationship management** – One knows how to develop and maintain good relationships, communicate clearly, inspire and influence others, work well in a team, and manage conflict.

DISCUSSION

Relation between *Dosha* and *Medha*

Tridosha represent definite biological process that take place inside the body. Hence may be described as an ingoing organised protoplasmic nutrient material in the circulation. These three are called *Dosha* as they are susceptible to vitiation and they are known as *Dhatu* as they support the body in their state of equilibrium. In balanced state *Dosha* are claimed to influence *Medha* (intelligence) alternatively in the following manner.

Vata is not directly concerned with *Medha* but in the whole process of perception of knowledge, up to recall, it plays a major role. In the general functions of *Vata*, *Acharya Charaka* has mentioned that it coordinates all the sense faculties and helps in the enjoyment of their objects. ⁽³⁸⁾ Sense faculties include all *Jnanendriya and Karmendriya* (sense organs and Motor organs). Thus it helps in the process of perception of knowledge.

Among the five types of *Vata*, *Prana* ⁽³⁹⁾ is responsible for controlling the functions of *Buddhi* (perception of knowledge), *Indriya* (sense and motor organs), *Hrudaya* (organ) and *Manas*, while *Udana* helps in *Dhi* (intellect), *Dhruti* (courage), and *Manobodharanadi Karma*. Location of *Manas* ⁽⁴⁰⁾ is in *Shiras*. *Mano Vikara* are controlled by *Vata* located in *Shiras* through Limbic System of CNS. Along with *Vata Dosha*, the *Sadhaka Pitta*, *Alochaka Pitta*, *Avalambaka Kapha*, *Tarpaka Kapha* too influence all such functions as their location is also *Shiras* and *Hrudaya*.

Hrudaya is the *Chetana Sthana* location of *Manas*, ⁽⁴¹⁾ and the *Chetana or Manas* is associated with *Mano Vikara* or emotions. ⁽⁴²⁾ Since the coordination of *Manas*, *Indriya* and *Buddhi* are necessary for *Jnanotpatti*, it is clear that they are interrelated and coordinated by the *Tridosha*. Hence a person's emotions and intelligence are interrelated. Thus the ability to

understand, manage or control one's emotions as well as other person's thoughts or emotions which is known as Emotional Intelligence is regulated by the *Tridosha*. In the same way the IQ, which is the capacity of an individual to act purposefully to think rationally and to deal effectively with his environment, would also be regulated by the *Tridosha*.

Modern human physiology explained the importance of Limbic system of CNS. Limbic system is highly sensitive to changes in the environment. They are responsible for emotions and include many nuclei around the center of the brain, such as amygdala for survival and fear response, Hippocampus for anger and spatial awareness, the Nucleus accumbens for pleasure, the Insula for saliency of experience and Hypothalamus that integrates the activity of the autonomic nervous system and responsible for homeostasis. The Limbic system along with Hypothalamus constantly changes the state of mind and body. ⁽⁴³⁾

Even though a person belongs to *Pitta* or *Kapha* predominant *Prakruti*, all his psychic and physical activities are driven through or controlled by *Vata Dosha*. Based on the predominant *Dosha*, the observable mental and physical behavior and characteristics of a person may change.

Effect of *Vata Dosha* on *Medha* w.s.r. to *Deha Prakruti*

In the characteristics of *Vata Dosha* predominant *Prakruti*, *Acharya Charaka* has mentioned that *Vata Prakruti* people due to the *Sheeghra Guna* of *Vata* seems quick in grasping but weak in recalling things means they have good short term memory but poor long term memory. ⁽⁴⁴⁾ While *Acharya Sushruta* has said that they have lack of patience and less discriminative power. ⁽⁴⁵⁾ According to *Acharya Vagbhata* they are unsteady in respect of *Dhriti*, *Smruti*, *Buddhi* and movement. ⁽⁴⁶⁾ So, there is more chance for getting a low score for IQ and EQ in *Vata* predominant individuals. Since the *Pitta Prakruti* individuals are mentioned as '*Medhavi*' by *Acharya Sushruta* in the concept of *Prakruti*, a high score for EQ and IQ might be obtained. For describing *Kapha Prakruti* individuals, *Acharya Vagbhata* used the word '*Budhya Yukta*'. Here also a high or moderate score for EQ and IQ might be obtained. Research works based on the above concepts has been going on to know if the *Dosha* influence EQ and IQ of an individual.

Effect of *Vata Dosha* on *Medha* w.s.r. to *Manasa Prakruti* ⁽⁴⁷⁾

- ***Satwika Prakruti***: *Satwika* type of mental faculty is auspicious. *Acharya Sushruta* has mentioned that *Satwika* types of people are possessed with good *Buddhi*, *Medha*,

Smruti and Dhruti (courage). Means they have these faculties all together. They are endowed with knowledge, good memory, retentive power and courage. *Pitta Dosha* contributes for more *Satwika* characteristic features.

- ***Rajasika Prakruti***: *Rajasika* type of mental faculty represents wrathful disposition. *Rajasika* people are impatient in nature. They have no proper control on mind. *Vata Dosha* contributes for more *Rajasika* characteristic features.
- ***Tamasika Prakruti***: *Tamasika* type of mental faculty represents ignorant disposition. People are less intelligent and devoid of mental faculties. They are considered to be stupid and deficient of all the intellectual faculties. *Kapha Dosha* contributes for more *Tamasika* characteristic features.

So, IQ and EQ must be more in *Satwika Prakruti* persons, moderate in *Rajasika Prakruti* persons and be low in *Tamasika Prakruti* persons.

Medha vis-à-vis IQ and EQ

The dictionary meaning of *Medha* is Intelligence, which is the capacity to acquire capacity." (Woodrow, 1921).⁴⁸

Another definition for Intelligence is "Intelligence is a general mental adaptability to new problems and new situations of life "(Stern, 1914). Intelligent level is a gross effect of cerebral, cultural and emotional status and is agreed by most of the clinical psychologists in present era.

Medha enables person to behave according to the need and necessity thereby one can become self - efficient to achieve *Chaturvidha Purushardha* (four aims of life) i.e. *Dharma* (righteousness), *Artha* (economic values), *Kama* (desires) and *Moksha* (salvation).⁴⁹

Acharya Sushruta in the context of *Nidra* (sleep) mentioned that through the coordination between *Medha* and *Manas*, proper *Nidra* occurs.⁵⁰ Thus ***Medha* (intelligence) , *Manas* and *Mano Vikara* are interrelated.**

For the assessment of *Medha* the available parameter to measure is Emotional Intelligence Scale and Intelligence Quotient. Both Emotional Quotient and Intelligence Quotient can be considered as components of broad concept of *Medha* in the present era.

CONCLUSION

Dosha especially *Vata Dosha* plays a major role in perception, retention and recall process of knowledge. It coordinate the functions of *Medha*. The role of *Nidra* is also important in coordinating *Medha*. Any imbalance in *Vata dosha* and *Nidra* adversely affect the functions of *Medha*. If the functions of *Medha* gets impaired it gradually reflects in the normal behaviour and intelligence of a person. Thus there is an association between *Vata dosha*, *Manas*, *Nidra* and *Medha* through which the effect of *Vata dosha* on IQ and EQ, can be interpreted which guide various future research works.

REFERENCES

1. JT Acharya. Charaka Samhita Dipika commentary of Chakrapanidutta, Sutra Sthana; Deerghamjeeviteeyam: Chapter 1, Verse 57. Reprint edition. Varanasi (India); Choukambha Sanskrit Sansthan; 2004. 16p.
2. Murthy Srikanta. Ashtanga Sangraha of Vagbhata with English translation, Sutrasthana; Ayushkamiyam : Chapter 1, Verse 42, 4th ed .Varanasi (India): Choukambha Orientalia; 2003. 14p.
3. Murthy Srikanta. Ashtanga Sangraha of Vagbhata with English translation, Sutrasthana; Ayushkamiyam : Chapter 1, Verse 42, 4th ed. Varanasi (India): Choukambha Orientalia; 2003. 349p.
4. JT Acharya. Charaka Samhita Dipika commentary of Chakrapanidatta, Vimana Sthana; Rogabhishagjiteeyam :Chapter 8, Verse 98. Reprint.Varanasi (India): Choukambha Sanskrit Sansthan; 2004. 277p.
5. JT Acharya. Charaka Samhita Dipika commentary of Chakrapanidatta, Vimana Sthana: Chapter 8, Verse 98. Reprint .Varanasi (India): Choukambha Sanskrit Sansthan; 2004. 277p.
6. R.K.Narayan. Susruta Samhita with Nibandha Sangraha Commentary,Sutra Sthana: Vranaprashnamadhyayam, Chapter 21, Verse 5. 8th ed. Varanasi (India): Choukambha Orientalia; 2005. 99p.
7. Murthy Srikanta. Ashtanga Sangraha of Vagbhata, Sutrasthana: Ayushkamiyam, Chapter 1, Verse 26, 4th ed. Varanasi (India): Choukambha Orientalia; 2003. 7p.

8. Murthy Srikanta. Ashtanga Sangraha of *Vagbhata*, Sutrasthana: Doshadi Vijnaneeyam, Chapter 19, Verse 1, 4th ed. Varanasi (India): Choukambha Orientalia; 2003.349p.
9. Murthy Srikanta. Sharngadhara Samhita of Sarngadhara English Translation, Prathama Khanda; Kalaadikakhyana: Chapter 5, Verse 24, 5th ed. Varanasi (India): Choukambha Orientalia; 2003. 23p.
10. Murthy Srikanta. Ashtanga Sangraha of Vagbhata. Sutrasthana: Doshabhedeeyam, Chapter 20, Verse 2, 4th ed . Varanasi : Choukambha Orientalia; 2003. 368p.
11. Murthy Srikanta. Sharngadhara Samhita of Sarngadhara English Translation, Prathama Khanda; Kalaadikakhyana: Chapter 5, Verse 24, 5th ed. Varanasi (India): Choukambha Orientalia; 2003. 23p.
12. Murthy Srikanta. Sharngadhara Samhita of Sarngadhara English Translation, Prathama Khanda; Kalaadikakhyana: Chapter 5, Verse 24, 5th ed. Varanasi (India): Choukambha Orientalia; 2003. 23p.
13. Amma Sreekumari, Muthuswami N.E. Vagbhata's Ashtanga Sangraha with Sasilekha commentary by Indu, Sootrasthana; Ayushkaameeyamadhyayam: chapter 1,edi. on behalf of Govt.of Kerala, 1982. 7p.
14. Murthy Srikanta. Ashtanga Sangraha of Vagbhata with English translation, Sutrasthana; Ayushkamiyam : Chapter 1, Verse 42, 4th ed .Varanasi (India): Choukambha Orientalia; 2003. 14p
15. YT Acharya.Susruta Samhita Nibandhasangraha commentary of Dalhanarevised by Nagarjuna, Sutrasthana; Chapter 46/ 526, ed. Varanasi (India): Choukambha Orientalia; 2002. 253p
16. Amma Sreekumari, Muthuswami N.E. Vagbhata's Ashtanga Sangraha with Sasilekha commentary by Indu, Sootrasthana; Ayushkaameeyamadhyayam: chapter 1,edi. on behalf of Govt.of Kerala, 1982 .286p.
17. Amma Sreekumari, Muthuswami N.E. Vagbhata's Ashtanga Sangraha with Sasilekha commentary by Indu, Sootrasthana; Ayushkaameeyamadhyayam: chapter 1,edi. on behalf of Govt.of Kerala, 1982 .286p
18. Murthy Srikanta. Ashtanga Sangraha of Vagbhata with English translation, Sutrasthana; Ayushkamiyam : Chapter 1, Verse 42, 4th ed. Varanasi (India): Choukambha Orientalia; 2003. 349p

19. JT Acharya. Charaka Samhita Dipika commentary of Chakrapanidatta, Vimana Sthana; Rogabhishagjiteeyam: Chapter 8, Verse 98. Reprint. Varanasi (India): Choukambha Sanskrit Sansthan; 2004. 277p.
20. JT Acharya. Charaka Samhita Dipika commentary of Chakrapanidatta, Vimana Sthana: Chapter 8, Verse 98. Reprint .Varanasi (India): Choukambha Sanskrit Sansthan; 2004. 277p.
21. R.K.Narayan. Susruta Samhita with Nibandha Sangraha Commentary, Sutrasthana: Vranaprashnam, Chapter 21, Verse 5. 8th ed. Varanasi (India): Choukambha Orientalia; 2005. 99p.
22. Murthy Srikanta. Ashtanga Sangraha of Vagbhata, Sutrasthana: Ayushkamiyam, Chapter 1, Verse 26, 4th ed. Varanasi (India): Choukambha Orientalia; 2003. 7p.
23. Murthy Srikanta. Sharngadhara Samhita of Sarngadhara English Translation, Prathama Khanda; Kalaadikakhyana: Chapter 5, Verse 24, 5th ed. Varanasi (India): Choukambha Orientalia; 2003. 23p.
24. Murthy Srikanta. Ashtanga Sangraha of Vagbhata , Sutrasthana : Doshabhedeeyam, Chapter 20, Verse 2, 4th ed . Varanasi : Choukambha Orientalia; 2003. 368p.
25. Murthy Srikanta. Sharngadhara Samhita of Sarngadhara English Translation, Prathama Khanda; Kalaadikakhyana: Chapter 5, Verse 24, 5th ed. Varanasi (India): Choukambha Orientalia; 2003. 23p.
26. Amma Sreekumari, Muthuswami N.E. Vagbhata's Ashtanga Sangraha with Sasilekha commentary by Indu, Sootrasthana; Ayushkaameeyamadhyaayam: chapter 1, edi. on behalf of Govt. of Kerala, 1982 .286p.
27. Amma Sreekumari, Muthuswami N.E. Vagbhata's Ashtanga Sangraha with Sasilekha commentary by Indu, Sootrasthana; Doshaadivijnaneeyamadhyaayam: chapter 19, edi. on behalf of Govt. of Kerala, 1982
28. Pandey K, Chaturvedi G . Charaka Samhita. Kathitapurusha Shareera Adhyaya: chapter 1, Varanasi, India: Choukambha Bharati Academy; 2015. 833p
29. D.Bhagwan, S.R.K. Charaka Samhita of Agnivesha. Shareerastaana; katidhapurusheeyam: chapter 1, verse 100-101. Varanasi: Choukambha Sanskrit series office, 2014. 337p.
30. YT Acharya, NR Acharya. Susruta Samhita of Susruta with English translation .7th.ed., Varanasi: Choukambha Orientalia, 2003. 502p.
31. YT Acharya, NR Acharya. Susruta Samhita of Susruta with English translation . 7th.ed., Varanasi: Choukambha Orientalia, 2003. 227p.

32. YT Acharya, NR Acharya. Susruta Samhita of Susruta with English translation .7th.ed.,Varanasi: Chowkambha Orientalia,2003.7p.
33. YT Acharya, NR Acharya. Susruta Samhita of Susruta with English translation .7th.ed.,Varanasi: Chowkambha Orientalia,2003.7p.
34. M K Anna, Ashtanga Hrudaya of Vagbhata. 7th.ed,Varanasi: Chowkambha Sanskrit Adhishtan, 2002. 923p.
35. Amma Sreekumari, Muthuswami N.E. Vagbhata's Ashtanga Sangraha with Sasilekha commentary by Indu, Sootrasthana; Ayushkaameeyamadhyayam: chapter 1,edi. on behalf of Govt.of Kerala, 1982 .286p.
36. Kaufman,Alan S; Lichtenberger, Elizabeth O.(2006).Assessing Adolescent and Adult Intelligence (3rd ed.).Hoboken, NJ:Wiley.ISBN978-0-471-73553-3.
37. www.helpguide.org/article/mental-health/emotional-intelligence-eq.htm dated 18-01-2021 time 14.04 IST
38. D.Bhagwan,S.R.K. Charaka Samhita of Agnivesha. Shareerastaana; katidhapurusheeyam: chapter 1, verse 100-101. Varanasi: Chowkambha Sanskrit series office, 2014. 337p.
39. YT Acharya, NR Acharya. Susruta Samhita of Susruta with English translation .7th.ed.,Varanasi: Chowkambha Orientalia,2003. 502p.
40. RK Sharma , B Dash. Charaka Samhita Dipika commentary of Chakrapanidutaa (English translation with critical exposition) Sutrasthana ; Vol 1,Chowkambha Sanskrita Series, Varanasi,Sixth edition; 2009. 408p.
41. KR Murthy Shrikant, Susruta Samhita Shareerasthanam; Vol. 1, Garbha vyakarana Shariram: chapter 4, Chowkambha Orientalia, Varanasi, Reprint edition; 2010.63p
42. <https://www.learnssanskrit.cc> dated 20-01-2021 time 11.04 IST
43. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2917081/>
44. JT Acharya. Charaka Samhita Dipika Commentary of Chakrapanidatta;Vimana Sthana: Rogabhishagjiteeyam, Chapter 8, Verse 98. Varanasi (India):Choukambha Sanskrit Sansthan; 2004. 277p.
45. JT Acharya. Susrutha Samhita with Nibandhasangraha Commentary of Dalhana. Shareera Sthana: Garbhavyakaranam, Chapter 4, Verse 64. Reprint ed. Varanasi (India): Chaukambha Sanskrit Sansthan; 2009. 361p.
46. Paradara HSS. Ashtanga Hrudaya with Sarvangasundara Commentary of Arunadatta and Ayurvedarasayana Commentary of Hemadri. Shareera Sthana: Angavibhaga Shareeram, Chapter 3, Verse 84. 9 th ed. Varanasi (India): Chaukambha Orientalia; 2005. 402p.

47. JT Acharya. Susrutha Samhita with Nibandhasangraha Commentary of Dalhana. Shareera Sthana: Sarvabhootachinta Shareeram, Chapter 1, Verse 18. Reprint ed. Varanasi (India): Chaukambha Sanskrit Sansthan; 2009. 343p.
48. <https://www.wisdomlib.org/definition/> medha
49. Amma Sreekumari, Muthuswami N.E. Vagbhattaa's Ashtanga Sangraha with Sasilekha commentary by Indu, Sootrasthana; Ayushkaameeyamadhyaayam: chapter 1,edi. on behalf of Govt.of Kerala, 1982.
50. JT Acharya. Sushruta Samhita of Sushruta; 7th ed: Varanasi: Chowkhamba Orientalia. 2003.7p.

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