ORIGINAL RESEARCH PAPER

Ayurveda

KEY WORDS: Sushruta Samhita, Kaumarbhritya, Poshana, Acharya Sushruta, Samskara, Dhatri Yojana, Karnavedhana.

AN INSIGHT INTO THE CONTRIBUTIONS OF SUSHRUTA SAMHITA IN THE FIELD OF KAUMARBHRITYA

Dr. Sagrika Prakash* P.G. Scholar, Department of Kaumarbhritya, Rajiv Gandhi Government PG Ayurvedic College & Hospital, Paprola, Himachal Pradesh *Corresponding Author

Dr. Karam Singh Senior Lecturer, Department of Kaumarbhritya, Rajiv Gandhi Government PG Ayurvedic College & Hospital, Paprola, Himachal Pradesh

ABSTRACT

Sushruta Samhita is one of the three principal treatises of the Brihattrayi, which form the foundational corpus of ancient Indian medical science, Ayurveda. Although it is widely recognized as a landmark text in the field of surgery and is predominantly associated with surgical excellence, the extensive contributions of Acharya Sushruta to other branches of medicine remain comparatively less explored. Acharya Sushruta himself emphasized that proficiency in one's own discipline cannot be achieved without adequate knowledge of allied branches. Kaumarbhritya, one of the eight branches of Ashtanga Ayurveda, deals with the care of infants and children, along with the understanding and management of their diseases. While Kashyapa Samhita is regarded as the principal classical text of Kaumarbhritya, its incomplete availability necessitates reliance on other authoritative treatises for comprehensive learning and clinical clarification by students and physicians. The contributions of Acharya Sushruta are vast and multifaceted, and this review represents an effort to highlight the significant insights and knowledge related to Kaumarbhritya preserved within Sushruta Samhita.

INTRODUCTION

Kaumarbhritya is one of the branches of Ashtanga Ayurveda that focuses on the care and management of diseases affecting infants and children. Although Kashyapa Samhita is considered the primary classical text of Kaumarbhritya, its incomplete availability necessitates consultation of the Brihattrayi for comprehensive understanding. Among the Brihattrayi, Sushruta Samhita, composed by Acharya Sushruta, provides a detailed exposition of Ashtanga Ayurveda, wherein Kaumarbhritya is placed at the fifth position following Shalya, Shalakya, Kayachikitsa, and Bhutavidya.[1] According to the traditional view, Ayurveda, a branch of Atharvaveda, was propounded by Lord Brahma even before the creation of living beings and was originally composed in one thousand chapters comprising one lakh shloka, later classified into eight branches.[2] Acharya Sushruta described Kaumarbhritya as the discipline concerned with child-rearing practices, purification of maternal breast milk, diseases arising from consumption of vitiated breast milk, and their management.[3] The subject has been elaborately discussed in Shareera Sthana and in twelve chapters of Uttara Tantra (chapters 27 to 38), with related concepts scattered across other sections of the Samhita. Acharya Sushruta covered essential principles such as nourishment of the newborn, nursing practices, protection of children, and management of pediatric disorders, providing a foundational understanding of the subject. He also discussed Dhatri Yojana, Stanyaguna, Stanyapanavidhi, Shishu Poshana, and Stanyanasha, along with measures to protect infants from Graha and the importance of Samskara such as Rakshakarma, Annaprashana, and Namakarana. Additionally, he described complications resulting from incorrect puncture of the ear or its Sira, thereby reflecting the depth and clinical relevance of Kaumarbhritya as presented in Sushruta Samhita.

Embryology

In the context of embryology, Acharya Sushruta has described not only the anatomical aspects of various bodily structures but has also provided a detailed account of development beginning from the intrauterine stage, including the method of conception and the sequential formation of tissues and organs. According to Sushruta, during sexual intercourse there is liberation of Teja (energy), which, in association with Vayu, stimulates Shukra (spermatozoa) to enter the vagina, where it unites with Artava (ovum). He explained that Shukra is Saumya (cool) in nature, whereas Artava is Agneya (warm), and the combination of Agni and Soma within the Garbhashaya (uterus) results in the origin and formation of the foetus.[4] From the moment of conception, foetal development has been described on the basis of gradual increase in size and shape, wherein the embryo appears like a Budbuda (bubble) at the end of the first month, becomes rounded like a Pinda (small ball) and solidifies by the end of the second month. During the third month, differentiation of the embryo occurs with the formation of five buds corresponding to the head and neck, two upper limbs, and two lower extremities. By the end of the fourth month, these structures become well differentiated and the heartbeat is evident. The development of Manas (brain) takes place in the fifth month, followed by the development of Buddhi (intellect) in the sixth month, complete bodily development in the seventh month, and activation of Ojas in the eighth month, culminating in the delivery of the child at the end of the ninth or tenth month.[5]

Navjata Shishu Paricharya

Acharya Sushruta has described systematic neonatal care immediately after delivery, beginning with cleansing measures for the newborn. He stated that soon after birth, the Ulva (vernix caseosa) and mouth of the neonate should be cleaned using a mixture of Saindhava lavana (rock salt) and Ghrita, and a cotton swab smeared with Ghrita should be placed on the head of the baby. This is followed by Nabhinadi Kartana, wherein the umbilical cord is gently pulled up to a length of eight Angula (finger breadth), tied with a thread, and then severed, with one end loosely secured around the neck of the neonate. Subsequently, Jatakarma is performed, during which the newborn is given a cold-water bath and made to lick Madhu (honey), Ghrita (ghee), and powdered Ananta (gold) using the ring finger. Finally, the neonate is anointed with Bala taila and bathed using a warm herbal decoction selected according to the season, Dosha, and strength of the child.[6]

Balopachara (Care of the Newborn)

Acharya Sushruta has described specific environmental and protective measures for the care of the newborn after birth. He stated that the newborn should be wrapped in soft linen and placed on a bed covered with soft linen sheets, and gentle fanning should be done using twigs of Pilu, Badari, Nimba, or Parushaka. A cotton pad soaked in oil should be frequently kept on the head of the infant. The newborn should be exposed to the fumes of Rakshoghna drugs, and the same drugs should also be tied to the hands, feet, head, and neck of

the baby for protection. In addition, powders of Tila, Atasi, and Sarshapa should be sprinkled throughout the room, and fire should be lit in the dwelling chamber, as part of the measures prescribed to maintain warmth, hygiene, and protection in the neonatal environment.[7]

Shishu Aahara (Feeding of Newborn)

Acharya Sushruta has described a specific feeding regimen for the newborn during the initial days after birth. On the first day, the child is administered a mixture of Madhu (honey), Ghrita (ghee), and Ananta (gold), accompanied by the chanting of sacred hymns three times. During the second and third days, Ghrita boiled with Lakshamana is given to the newborn. Thereafter, breast milk mixed with Madhu and Ghrita is administered twice daily in a quantity equal to the child's own palm. According to Sushruta, breast feeding should be initiated from the fourth day, as he explained that the Dhamni (channels) located in the region of the heart open after three to four days, facilitating the upward production of breast milk, which forms the basis for his recommendation regarding the timing of breast feeding.[8]

Vaya Vibhajana (Classification of Age)

According to Acharya Sushruta, Vaya (age) is classified into three distinct categories, namely Balya (childhood), Madhya (middle age), and Vriddha (old age). Individuals below sixteen years of age are included under Balya and are referred to as Bala (children). This stage is further subdivided into three groups based on dietary intake. Kshirapa denotes children up to one year of age who subsist exclusively on milk, Kshirannada refers to children up to two years of age who consume both milk and food, and Annada includes children above two years of age who are capable of taking solid food alone.[9]

Dhatri Yojana (Wet Nurse Selection)

Acharya Sushruta has emphasized the importance of Dhatri Yojana for promoting the health and enhancing the strength of the child, stating that a wet nurse should be appointed for this purpose. He described specific qualities of an ideal wet nurse, including belonging to the same caste, having a moderate body build, being of middle age, and being free from diseases. Acharya Sushruta also cautioned that improper selection of a wet nurse may adversely affect the health of the child, thereby highlighting the significance of careful and appropriate choice in Dhatri Yojana.[10]

Stanya (Breast milk)

- **Concept of Stanyapana**

Acharya Sushruta has described a specific and systematic method of Stanyapana for feeding the child. He stated that on an auspicious day the child should be bathed and dressed in new clothes, after which the wet nurse should sit with her back towards the east and keep the child on her lap facing north. The right breast of the wet nurse should then be washed, gently massaged, and a small quantity of milk should be expressed out, following which the milk is sanctified with a hymn before feeding the child. Acharya Sushruta warned that failure to follow this procedure may lead to several disorders arising from habitual feeding, as non-expression of milk can result in Stabdha (hardening of the breast) and Stanya Purana (excess accumulation of milk), causing upward obstruction of the Stanyavaha Srotasa, which may manifest as Kasa (cough), Shwasa (dyspnoea), and Vammi (vomiting) in the child.[11]

- **Stanya Nasha (Lack of Breast Milk)**

Acharya Sushruta has stated that factors such as Krodha (anger), Shoka (grief), and Avatsalya (lack of affection) can lead to Stanya Nasha, resulting in the loss or non-production of breast milk. Therefore, the Dhatri is advised to remain calm and composed, follow a wholesome and healthy diet, and consume specific substances and drugs such as Mamsa (meat), Matsya (fish), Lahsuna (Allium sativum Linn.), and Shatavari (Asparagus racemosus Wild.) to support and restore breast milk production.[12]

- **Stanya Pariksha (Examination of Breast Milk)**

Acharya Sushruta has described the method for examination of Shudha Stanya (pure breast milk) and has clearly defined its characteristics. Breast milk that is cold, clear, thin in consistency, conch-shell like in colour, mixes uniformly with water, does not form threads or froth, and neither floats nor sinks in water is considered pure and not vitiated by Dosha. Such milk promotes health, supports proper bodily growth, and enhances the strength of the child. He further stated that breast milk obtained from women who are hungry, grief-stricken, pregnant, or suffering from fever should not be administered to the child.[13] In situations where breast milk is insufficient to meet the needs of the child, milk from a goat or cow may be given after assessing the condition of the child and determining the appropriate quantity required.[14]

Shishu Poshana

Acharya Sushruta has mentioned that Ghrita boiled with appropriate drugs should be administered during every stage of Balyavastha for the promotion of health, enhancement of strength and intelligence, and prolongation of the lifespan of the child. Shishu Poshana, or nourishment of the child, is described as a vital aspect of childcare, encompassing the care and nourishment of the child from birth through adolescence. It emphasizes overall development by addressing physical, mental, and spiritual aspects, and represents a comprehensive approach aimed at raising a healthy, happy, and well-developed individual with a strong foundation for life.[15]

Shishu Rakshana (Care of the Child)

Acharya Sushruta has advised that a child should not be awakened abruptly from sleep, should be held gently and comfortably, should not be frightened, and should neither be lifted up suddenly nor put down forcefully, as such actions may lead to vitiation of Dosha. He further emphasized the need to protect the child from exposure to Vata (breeze), Atapa (sunlight), Vidyuta (lightning), and Nimna Sthana (deep pits). By following these protective measures, the child is able to grow free from diseases, remain Prasanna Mana (happy), and become Satva Sampanna (mentally sound), thereby ensuring healthy physical and mental development.[16]

Raksha Karma (Protective Rituals)

According to Acharya Sushruta, every possible effort should be undertaken to protect the child from Graha, which refers to possession by evil spirits, in order to safeguard the child from their harmful effects. He emphasized that such protection is essential for preventing illnesses and adverse conditions that are believed to arise due to the influence of Graha.[17]

Samskara

- **Namakarana Samskara (Naming Ceremony)**

On the 10th day, the mother and father, having performed auspicious rites and ceremonies and after the recitation of benedictory prayers, should bestow a name upon the child—either a name of their choice or one based on the Nakshatra.[18]

- **Anna Prashana (Giving Solid Food)**

Acharya Sushruta stated that at 6 months of age the child should be introduced to Anna (solid food) that is Laghu (easily digestible) and Hitta (beneficial or suitable for the child), indicating that after 6 months the child should be made to partake of light and wholesome food.[19]

- **Karna Vyadha Samskara (Piercing the Ear Lobe)**

Acharya Sushruta stated that the ears of Bala (children) should be pierced for the purposes of Raksha (protection from evil) and Abhushana (wearing ornaments).[20]

METHOD

Acharya Sushruta has described the procedure of ear piercing to be performed during the 6th or 7th month of age, preferably in the bright fortnight on a day associated with an auspicious stellar constellation, after completing religious

rites and Mantra ucharana (chanting of hymns). The child is placed on the lap of a wet nurse, following which the physician holds the ear with the left hand, gently pulls it downward, exposes it to sunlight, and pierces it with the right hand in a straight manner just below the Devakrita chidra (natural orifice of the ear). For a thin ear lobe, a Suchi (needle) is used, whereas an Aara (thick needle) is employed if the ear lobe is thick. In male children, the right ear is pierced first, while in female children the left ear is pierced initially. After piercing, a Pichuvarti (cotton thread) is inserted into the hole. Proper Parishechana is then performed using Ama Taila, and a thicker Varti (thread) is introduced every 3rd day. Once the aggravated Dosha subsides and complications resolve, a Laghu Vardhanaka (dilator) is used to gradually dilate the ear piercing.[21]

Complications

Acharya Sushruta has described various complications that may arise during ear piercing if the procedure is not performed correctly. Piercing at an incorrect site is indicated by excessive bleeding and severe pain, suggesting that the puncture has been made at the wrong location.[22] Further complications occur when Vedhana (puncturing) is performed on the Sira (veins), leading to specific conditions such as Kalika, Marmarika and Lohitika.[23] Puncturing Kalika results in Jwara (fever), Daha (burning sensation), Shvaythu (swelling), and Vedana (pain).[23] Injury to Marmarika causes Vedana (pain),Jwara (fever), and Granthi (tumours).[23] Puncturing Lohitika leads to Manyastambha (neck stiffness or torticollis), Aptanaka (convulsions), Shirograha (headache?), and Karnashoola (pain in the ears).[23] Additionally, Karna Chedana, or severing of the ear, may occur either due to aggravated Dosha or as a result of Abhighata (injury).[24]

MANAGEMENT

If the ear is punctured incorrectly or if swelling and pain develop, the Varti (thread) should be removed and a local medicated paste should be applied until complete healing occurs, after which the ear may be pierced again in the proper manner.[25] For cases of Karna Chhedana, Acharya Sushruta has described fifteen types of Karna Bandhana (otoplasty) as corrective measures for managing the condition.[26]

- **Vidyarjana (Initiation of Study)**

Vidyarjana should be initiated only after ensuring that the child has attained adequate Shakti (strength to pursue studies), and that the nature of studies should be appropriate to the caste.[27]

Shishu Chikitsa (Treatment of Children)

Acharya Sushruta explained that Shleshma predominates during Balyavastha (childhood), Pitta increases markedly during Madhyavastha (middle age), and Vata becomes dominant during Vriddhavastha (old age), and therefore therapeutic measures should be planned according to the predominance of Dosha at each stage of life. He advised that procedures such as Agni (thermal cautery), Kshara (alkali cautery), and Virechana (purgation) should generally be avoided during childhood and old age in diseases otherwise curable by these therapies, or if absolutely necessary, they should be administered in a mild and gradual manner.[28] Jalaukavacharana (leech therapy) is described as the easiest and most convenient method for removing vitiated blood, particularly suitable for kings, wealthy individuals, children, elderly persons, those who are fearful or debilitated, women, and individuals of tender constitution.[29]

In Kshirapa children, Acharya Sushruta advised that medicines should be Mridu (mild) and Achedaniya (not forcefully expelling the Dosha), administered in appropriate doses along with Ghrita or milk, while the wet nurse should be given medicines separately when required.[30] Whatever medicine is prescribed, its paste should be applied to the breasts of the mother or wet nurse so that the child receives it through sucking.[31]

In cases of Jwara occurring in milk-fed children due to Vata, Pitta, or Kapha, administration of Ghrita for 1, 2, or 3 days respectively is considered beneficial, while for other types of fever it may be used as found suitable, thereby preventing the development of severe thirst. Ghrita may be used in all conditions except with purgative, enema, and emetic drugs, which should instead be applied to the breasts and administered through sucking to avoid emergency conditions.[32]In Kshirannada children, medicines are advised to be given to both the child and the wet nurse following the same principles, whereas in Annada children, medicines should be administered directly to the child alone.[30]

Aushadha Matra (Medicinal Dosages)

Acharya Sushruta has described the principles of Aushadha Matra (dosage of medicines) in children, stating that the quantity of medicine administered should progressively increase with advancing age, except during Parihani (the age of slight diminution), during which the dose should remain the same as that prescribed in the 1st period of Balya. In Kshirapa children, after 1 month of age, the dose of medicine is advised to be equivalent to Anguliparvadvaya, which is the amount adhering to 2 finger joints after dipping them into a liquid containing medicine mixed with Madhu or Ghrita. For Kshirannada children, the appropriate dose is said to be equal to the size of Kolasthi, while in Annada children, the dose should correspond to the size of Kola, thereby indicating a graded and age-appropriate approach to drug administration in pediatric practice.[33]

Shishu Roga Gyanopaya (Recognition of Childhood Diseases)
Acharya Sushruta stated that when the Dhatri (wet nurse) indulges in Mithya Ahara (unhealthy or improper diet) and similar factors, it leads to vitiation of Dosha in her body, resulting in vitiation of Stanya (breast milk) and the development of various diseases in the child.[34] He further explained methods for recognizing diseases in children by observation, emphasizing that the part of the body which the child repeatedly touches or cries when touched by others should be considered the site of disease. In disorders of the head, the child keeps the eyelids closed and is unable to hold the head properly. In diseases of the bladder, symptoms such as Mutrasanga (obstruction of urine), Ruja (pain), Trisha (thirst), and Murcha (fainting) are observed. Conditions affecting the Koshtha (abdomen) present with Vinamutrasanga (obstruction of faeces and urine), Vaivarnya (discoloration), Chardi (vomiting), Aadhmana (flatulence), and Antrakujana (intestinal gurgling). In diseases involving the entire body, continuous crying of the child is considered a significant clinical indicator.[35]

Diseases

- **Genetic Disorders:** Acharya Sushruta demonstrated an understanding of the role of heredity, developmental influences, and genetic factors in the origin of diseases. He described several congenital defects inherited from parents or arising due to indulgences of the mother during pregnancy and therefore advised avoidance of exertion for proper foetal development.[36]
- **Tundi (Eversion of Umbilicus):** Inflation of the umbilicus associated with pain due to aggravated Vata is termed Tundi and is treated by Snehana, Svedana, and Upnahana using medicated poultices.[37]
- **Gudapaka (Proctitis):** This condition is managed by Pittaghna Chikitsa, especially Rasanjana administered for Pana and Alepana.[38]
- **Mastulunga Kshaya (Depletion of Brain Matter):** Aggravation of Vata leads to depression of the palatal bone, thirst, and irritability. Treatment includes Ghrita processed with Madhura drugs for licking and oleation, along with stimulation by sprinkling cold water.[39]
- **Sannirudha Guda (Anal stricture):** Suppression of the urge of defecation aggravates Vata, obstructs the Mahastrotasa, and narrows the anal orifice, causing

difficulty in defecation.[40] Gradual dilatation is advised, similar to Niruddha Prakash.[41]

- **Gudabhramsha (Rectal Prolapse):** Caused by Pravahana or Atisara in Ruksha Durbala Deha.[42] Management includes digital repositioning, internal and external Vata-pacifying drugs, lubrication with Sneha, fomentation, gradual reduction, and Gophana Bandha with a central opening for passage of Vayu.[43]
- **Niruddhaprakash (Phimosis):** Localized Vata in Mani Charma thickens the skin and obstructs urine flow.[44]A Nadi Yantra, open at both ends and prepared from wood or iron, is lubricated with ghee and inserted into the urethra, with progressively thicker tubes introduced every 3 days to widen the urethral channel. When this approach fails, Shastra Karma is advised, involving incision of the Sevani (raphe) and subsequent wound management similar to a dorsal slit.[45]
- **Parivartika (Paraphimosis):** Caused by excessive manipulation or injury, leading to painful exposure of the Mani, burning sensation, discharge, and sometimes itching and hardness due to Kapha.[46] Management involves lubrication with Ghrita, slow manual repositioning, and warm poultice application for 3–5 days.[47]
- **Vrishanakacchu:** Due to aggravated Kapha and Rakta in children not practicing Snana and Utsadana, resulting in itching and vesicle formation on the scrotum.[48] It is treated as Ahiputana.[49]
- **Jatumani (Birth Mark):** A painless, congenital, slightly raised reddish Mandala caused by Kapha and Rakta, managed by excision and cauterization.[50]
- **Masurika (Smallpox):** Characterized by coppery or yellowish Sphota with Daha, Jwara, and Ruja affecting the body, face, and oral cavity.[51] Treatment includes Lepa used in Kushtha or Shleshmapitta Visarpa.[52]
- **Pashanagardabha (Parotitis):** Presents as immobile swelling at the root of the lower jaw due to Kapha and Vata, associated with mild pain.[53]
- **Ahiputana (Napkin Rash):** Caused by prolonged contact of urine and feces leading to itching, vesicle formation, and ulceration.[54] Managed by purification of Stanya, intake of medicated Ghrita, application of Tutha Churna, and medicated decoctions.[55]
- **Ajagallika:** A painless, hard Granthi produced by Kapha and Vata, treated with Jalauka therapy when unripe and as Vrana when ripe.[56][57]
- **Bhagna (Fractures):** Fractures in Bala heal faster, usually within 1 month, compared to adults and the elderly.[58]

Graha Roga

Acharya Sushruta has provided a detailed account of Graha Roga specifically describing Balagraha—conditions attributed to the seizure of children by evil spirits—along with their genesis, clinical manifestations, and treatment modalities. This comprehensive description is presented across eleven chapters of Uttara tantra, spanning from chapter 27 to chapter 37. He enumerated the Navagraha responsible for these conditions, namely Skanda, Skandapsmara, Shakuni, Revati, Putana, Andhaputana, Shitaputana, Mukhmandika, and Naigmesha, thereby highlighting the systematic and detailed approach adopted by Acharya Sushruta in addressing Graha-related pediatric disorders.[59]

CONCLUSION

Sushruta Samhita, one of the three great treatises of Ayurveda collectively known as Brihat Trayi, is a remarkable composition of Acharya Sushruta, characterized by systematic arrangement and detailed exposition of subjects in the form of verses. Owing to his profound knowledge and extraordinary contributions to the field of surgery, he is revered as the "Father of Indian Surgery" and the "Father of Plastic Surgery." Although surgical science received significant emphasis in the text, Acharya Sushruta did not overlook other branches of medicine and comprehensively addressed almost every domain of medical science. A thorough review of the Samhita reveals that it encompasses all essential concepts of Kaumarbhritya, including care of the newborn, breast feeding practices, protection of the child, and descriptions of pediatric diseases along with their management, which are sufficient to provide fundamental knowledge of the subject and address the queries of students, scholars, and physicians. Despite the research conducted to date, the text still contains numerous unexplored insights, indicating vast scope for further study, and it remains a source of pride to acknowledge Acharya Sushruta as a pioneering genius of India's ancient medical heritage.

REFERENCES

1. SrikanthMurthy K.R. Sushruta Samhita.Vol.1.Sutrasthana.Chapter 1/7.Varanasi.Chaukhambha Orientalia.Edition.,2012;4.
2. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sutrasthana.Chapter 1/6.Varanasi.Chaukhambha Orientalia.Edition.,2012;4.
3. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sutrasthana.Chapter 1/5.Varanasi.Chaukhambha Orientalia.Edition.,2012;5.
4. Srikanth Murthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 3/3.Varanasi.Chaukhambha Orientalia.Edition.,2012;35.
5. Srikanth Murthy K.R. Sushruta Samhita.Vol.1.Sharirasthana.Chapter 3/15-28. Varanasi.Chaukhambha Orientalia.Edition.,2012;38-43.
6. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/12-13.Varanasi.Chaukhambha Orientalia.Edition.,2012;155-156.
7. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/23.Varanasi.Chaukhambha Orientalia.Edition.,2012;159.
8. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/14.Varanasi.Chaukhambha Orientalia.Edition.,2012;156.
9. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sutrasthana.Chapter 35/29.Varanasi.Chaukhambha Orientalia.Edition.,2012;249-250.
10. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/28.Varanasi.Chaukhambha Orientalia.Edition.,2012;160.
11. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/29.Varanasi.Chaukhambha Orientalia.Edition.,2012;160-161.
12. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/30.Varanasi.Chaukhambha Orientalia.Edition.,2012;161
13. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/31.Varanasi.Chaukhambha Orientalia.Edition.,2012;161.
14. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/48.Varanasi.Chaukhambha Orientalia.Edition.,2012;166.
15. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/45.Varanasi.Chaukhambha Orientalia.Edition.,2012;165.
16. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/46-47.Varanasi.Chaukhambha Orientalia.Edition.,2012;165.
17. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/50 .Varanasi.Chaukhambha Orientalia.Edition.,2012;166.
18. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/24.Varanasi.Chaukhambha Orientalia.Edition.,2012;159-160.
19. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/49.Varanasi.Chaukhambha Orientalia.Edition.,2012;166.
20. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sutrasthana.Chapter 16/3.Varanasi.Chaukhambha Orientalia.Edition.,2012;111.
21. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sutrasthana.Chapter 16/7-8.Varanasi.Chaukhambha Orientalia.Edition.,2012;112.
22. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sutrasthana.Chapter 16/4.Varanasi.Chaukhambha Orientalia.Edition.,2012;112.
23. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sutrasthana.Chapter 16/5.Varanasi.Chaukhambha Orientalia.Edition.,2012;112.
24. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sutrasthana.Chapter 16/9.Varanasi.Chaukhambha Orientalia.Edition.,2012;112.
25. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sutrasthana.Chapter 16/6.Varanasi.Chaukhambha Orientalia.Edition.,2012;112.
26. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sutrasthana.Chapter 16/10.Varanasi.Chaukhambha Orientalia.Edition.,2012;113.
27. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/52.Varanasi.Chaukhambha Orientalia.Edition.,2012;167.
28. SrikanthMurthy K.R. Sushruta Samhita.Vol.1.Sutrasthana.Chapter 35/31-32. Varanasi.Chaukhambha Orientalia.Edition.,2012;250.
29. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sutrasthana.Chapter 13/3.Varanasi.Chaukhambha Orientalia.Edition.,2012;78.
30. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/37.Varanasi.Chaukhambha Orientalia.Edition.,2012;163.
31. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/39.Varanasi.Chaukhambha Orientalia.Edition.,2012;163.
32. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/40-41.Varanasi.Chaukhambha Orientalia.Edition.,2012;164.
33. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/38.Varanasi.Chaukhambha Orientalia.Edition.,2012;163.
34. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana. Chapter 10/32-33.Varanasi.Chaukhambha Orientalia.Edition.,2012;162.
35. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/34-36.Varanasi.Chaukhambha Orientalia.Edition.,2012;162-163.
36. Srikanth Murthy K.R. Sushruta Samhita.Vol.1.Sharirasthana.Chapter 3/15. Varanasi.Chaukhambha Orientalia.Edition.,2012;40.
37. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/43.Varanasi.Chaukhambha Orientalia.Edition.,2012;164.
38. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/44.Varanasi.Chaukhambha Orientalia.Edition.,2012;164.
39. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Sharirasthana.Chapter 10/42.Varanasi.Chaukhambha Orientalia.Edition.,2012;164.
40. SrikanthMurthy K.R.Sushruta Samhita.Vol.1.Nidanasthana.Chapter 13/55-56 .Varanasi.Chaukhambha Orientalia.Edition.,2012;553.

41. SrikanthMurthy K.R. Sushruta Samhita. Vol.2.Chikitsasthana.Chapter 20/47.Varanasi.Chaukhambha Orientalia.Edition.,2012;198.
42. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Nidanasthana.Chapter 13/61.Varanasi.Chaukhambha Orientalia.Edition.,2012;554.
43. SrikanthMurthy K.R. Sushruta Samhita. Vol.2.Chikitsasthana.Chapter 20/61-63.Varanasi.Chaukhambha Orientalia.Edition.,2012;200.
44. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Nidanasthana.Chapter 13/52-54.Varanasi.Chaukhambha Orientalia.Edition.,2012;553.
45. SrikanthMurthy K.R. Sushruta Samhita. Vol.2.Chikitsasthana.Chapter 20/43-45.Varanasi.Chaukhambha Orientalia.Edition.,2012;198.
46. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Nidanasthana.Chapter 13/47-49.Varanasi.Chaukhambha Orientalia.Edition.,2012;552.
47. SrikanthMurthy K.R. Sushruta Samhita. Vol.2.Chikitsasthana.Chapter 20/32.Varanasi.Chaukhambha Orientalia.Edition.,2012;197.
48. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Nidanasthana.Chapter 13/59-60.Varanasi.Chaukhambha Orientalia.Edition.,2012;554.
49. SrikanthMurthy K.R. Sushruta Samhita. Vol.2.Chikitsasthana.Chapter 20/60.Varanasi.Chaukhambha Orientalia.Edition.,2012;200.
50. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Nidanasthana.Chapter 13/41.Varanasi.Chaukhambha Orientalia.Edition.,2012;550.
51. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Nidanasthana.Chapter 13/38.Varanasi.Chaukhambha Orientalia.Edition.,2012;550.
52. SrikanthMurthy K.R. Sushruta Samhita. Vol.2.Chikitsasthana.Chapter 20/39.Varanasi.Chaukhambha Orientalia.Edition.,2012;196.
53. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Nidanasthana.Chapter 13/13.Varanasi.Chaukhambha Orientalia.Edition.,2012;546.
54. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Nidanasthana.Chapter 13/57-58.Varanasi.Chaukhambha Orientalia.Edition.,2012;553.
55. SrikanthMurthy K.R. Sushruta Samhita. Vol.2.Chikitsasthana.Chapter 20/58-59.Varanasi.Chaukhambha Orientalia.Edition.,2012;199.
56. SrikanthMurthy K.R. Sushruta Samhita. Vol.1.Nidanasthana.Chapter 13/4.Varanasi.Chaukhambha Orientalia.Edition.,2012;545.
57. SrikanthMurthy K.R. Sushruta Samhita. Vol.2.Chikitsasthana.Chapter 20/3-4.Varanasi.Chaukhambha Orientalia.Edition.,2012;192.
58. SrikanthMurthy K.R. Sushruta Samhita. Vol.2.Chikitsasthana.Chapter4/16.Varanasi.Chaukhambha Orientalia.Edition.,2012;562.
59. SrikanthMurthy K.R. Sushruta Samhita. Vol.3.Uttartantra. Chapter 27/4-5.Varanasi.Chaukhambha Orientalia.Edition.,2012;144.