

THEARPEUTIC PRINCIPLES OF KAUMARBHRITYA

Dr. Megha Agrawal¹ and Dr. Prashant Singh Bhadauria^{2*}¹M.D.Scholar, Dept. of Kaumarbhritya, ²M.D. Scholar, Dept. of Agad Tantra evum Vidhi Vaidyaka
Rani Dullaiya Smriti Ayurved P.G. Mahavidhyalaya evam Chikitsalaya, Bhopal.***Corresponding Author: Dr. Prashant Singh Bhadauria**

M.D. Scholar, Dept. of Agad Tantra evum Vidhi Vaidyaka, Rani Dullaiya Smriti Ayurved P.G. Mahavidhyalaya evam Chikitsalaya, Bhopal.

Article Received on 04/06/2019

Article Revised on 25/06/2019

Article Accepted on 15/07/2019

ABSTRACT

In Ashtanga Ayurveda, Kaumarbhritya is one of the prime branches of Ayurveda. Kaumarbhritya is a science which deals with the study and treatment of the child from the time of conception through childhood up to adolescence. Children are also considered as the most vulnerable class of society as they are unable to express themselves, dependent on caretaker. Thus children need a special attention and nursing. But In the current scenario, the faulty method of living, unbalanced diet, environmental pollution and other various regions has increased the incidence of Roga in day by day. As children are in a rapid continuous process of growth and development physically as well as intellectually the diseases occurring in children, the drug dose formats, modes of drug delivery are important aspects of therapeutics in children. Success of treatment depends on consideration of different facets like deranged Doshas, pathogenesis of disease, severity of disease, consideration of the system involved, geographical consideration, seasonal variation and stage of the disease. & failure of which leads to definite treatment failure. In paediatrics, all above mentioned facts should be kept in mind as the Doshas, Dooshya and disease are same as that of adults and even the medicine. Only different is in quantity, which is less. Consequently there arises a need to understand applied therapeutic principles to obey for approaching a sick child. This paper illustrates general as well as Panchkarma related applied therapeutic principles.

KEYWORDS: Kaumarbhritya, children, internal & external treatment.**INTRODUCTION**

Therapeutic principles means,

Therapeutic- the branch of medicine concerned with the treatment of disease and the action of remedial agents.**Principles-** A fundamental truth or proposition that serves as the foundation for a system of belief or behaviour or for a chain of reasoning.

So, Therapeutic principles are the criteria of treating all disease. Formulated under the guidance of the concept of holism and treatment based on syndrome differentiation, they are significant for clinically guiding the determination of therapeutic method, prescription and drugs.

Children's Therapeutic principles are consist of two type,

1. General principles (Samanya Chikitsa Siddhaanta)
2. Therapy (Shaishaviya Panchkarma)

In Ayurveda, basic principles of treatment are according to Ras-Panchak and five basic elements. These two are responsible for structural growth in Balayavastha. General principles are scattered among all Ayurvedic

texts which have been collectively arranged as per age classification.

The basic principle of Kaumarbhritya involves Panchkarma in later stage of development of Ayurveda science; however fixation of drug dose in and intensity of Baal Panchkarma is very important to prevent any side effect. It is believed that Panchkarma being Shodhana Chikitsa remove vitiated Dosha. The various steps of Panchkarma such as Vamana, Virechana, Niruha and Anuvasana Basti recommended in early childhood for the management of different abnormal physiological conditions.

NEED OF STUDY

Pediatric age group is the most vulnerable class of our society due to their tender nature (Saukumaryatva), lower body mass indexes (Alpakayatva). They cannot consume all types of foods (Sarva Anna Anupasevantva). All Dhatu are immature in nature. Also quality and quantity of Doshas and Dushya is less. The equilibrium of functional and structural entities like Prana, Dosha, Dhatu, Bala and Ojas is unstable. Secondary sexual characters are not yet fully developed. Status of Agni in children is unstable as they are not acclimatized with different types of foods. Also, cannot properly express

their demands and perform all kinds of activities like as an adult. Considering all these differences Ayurvedic texts has mentioned the applied therapeutic principles in Kaumarbhritya.^[1]

AIM AND OBJECTIVES

Aim: - To study the therapeutic principles of Kaumarbhritya.

AGE CLASSIFICATION

गर्भ	जन्म होने तक	गर्भधारण से जन्म होने तक
बाल	१ वर्ष तक	क्षीरप अवस्था
कुमार	१-१६ वर्ष तक	क्षीरान्नद से अन्नद अवस्था
यौवनावस्था	३४ वर्ष तक	धातु-बल-सत्व-वीर्य- पराक्रम आदि की वृद्धि
मध्यमावस्था	७० वर्ष तक	धातु-बल-सत्व-वीर्य- पराक्रम आदि की स्थिरता
वृद्धावस्था	७० से मृत्युपर्यन्त	धातु-बल-सत्व-वीर्य- पराक्रम आदि ह्रास

Acharya Kashyapa has considered the Garbha Avastha (intrauterine period) into age classification.^[2] This signifies the role of a paediatrician starts from the very moment of conception. Balayavastha (from birth of a child till 1 year of age) is the period of transitions of food habits changing from exclusive breast milk to the regular adult food materials. Kaumaravastha (from 1 year to 16 years of age) is the widest period of childhood as toddler, preschool, school age, and early adolescent period. Yauvana Avastha (16 years to 34 years) covers adolescent period where puberty approaches resulting in psycho-somatic changes.

GENERAL PRINCIPLES OF PAEDIATRIC THERAPEUTICS

As structural and functional development of organs in childhood is not properly completed, we should carefully think about their medication. In Ayurveda, basic principles of treatment are according to Rasapanchaka i.e Rasa, Guna, Veerya, Vipaka, and Prabhava. Although five basic elements which are Prithivi, Aap, Agni, Vayu, Akaash constitute each and every drug in universe, basically children are in possession of Prithvi and Aap mahabhutadhikya. These two are responsible for structural growth in Balayavastha.

Second important thing is that the stability of different organs in body is completely dependent on these two mahabhutas. So whenever we want to stabilize and improve the functionality of organs in Pediatric practices, we should always keep in mind, the role played by these two mahabhutas. Thus considering this fact, we should use Madhura rasa preferably. After a while, Vipaka is a biotransformation of rasa. Drugs with Katu Vipaka excrete Baddha Kosthata (constipation) which is not expected in Pediatric practice. So, Madhura Vipaki drugs should be used preferably as they are mild laxative in nature (Srushtavinmutra).

As we have seen earlier that Pediatric age group is the most vulnerable class of our society due to their tender nature (saukumaryatva), so this saukumaryatva should be

Object: - 1. To study the general principles of treatment according to age classification.

3. To study the principles of Panchkarma in Baalroga.

always kept in mind, whenever we are going to treat the Pediatric patients.

For this purpose the most important thing to be taken in to consideration, is the concept of Veerya. Thinking upon Veerya concept, Ushna Veerya drugs are considered more of a catabolic in nature. In children mild drugs which are anabolic in nature, should be prescribed. Concluding, the general principle of line of treatment in children should be focused upon Ras-Panchak of drugs, thus selection of drugs will preferably done considering Madhura Rasa, Sheeta Veerya and Madhura Vipaka.

The symptoms of diseases are Avyakata (not fully expressed) in children. Thus a delay in treatment leads to more complications. According to Acharya Charaka a sick child should be treated in the Purvaroop Avastha only (state of appearance of prodromal symptoms) which will prevent complications.

Before commencement of treatment a physician must examine the sick child by considering following points as Prakriti (nature of child and disease), Hetu (cause), Purvaroopas (prodromal symptoms), Lakshanas (actual signs and symptoms), and Upashaya (relief).

A child must be advised diet (ahara), daily routine (vihara), opposite to place (Desha), time (Kala), and nature of disease.

The effective management of paediatric disorders basically requires the understanding of 2 main principles both of which have to be tackled in a unique manner.

1. Understanding the disease of children=

दोषदूष्यमलाश्चैव महतां व्याधयश्च ये | त एव सर्वे बालानां मात्रा त्वल्पतरा मता ||

वाक्चेष्टयोरसामर्थ्यं वीक्ष्यं बालेषु शास्त्रवित् | भेषजं स्वल्पमात्रम् तु यथाव्याधि प्रयोजयेत् ||

(च. चि. ३०/ २८२-२८४)

The clinical presentation of a disease in children is in sharp contrast with that of the adults. Even among children with similar Dosha Dooshya involvement (A.H.U. 2/30), the nature of the disease varies according to age. The clinical skill of the physician should be highly competent enough for performing Darshana, Sparsana and Prashna Pariksha in children as they are with Dosha- Dooshya- mala Alpata (immature) and Vaakcheshta Aasamarthyam (hence interview with the pt. is not possible). Also the Purvaroop and Lakshana may be different because the nature of Samprapti is variable in children.

2. Application of therapeutics

- The dose of a drug should be strictly in accordance with the age. So the principles of posology should be accurately kept in mind while prescribing medicine for children.

मधुराणि कषायाणि क्षीरवन्ति मृदूनि च |

प्रयोजयेत् भिषक् बाले मतिमानप्रमादतः || च. चि. ३०/२८५

It's better to use drugs of Madhura Rasa which are usually of Mridu Veerya and the most ideal therapeutic form is Ksheerapaakam. Drugs prescribed to a child should preferably of Madhura (sweet), in Kwatha form (decoction), usually with milk as an Anupana, Mridu (soft) in nature.

- The administration of Shodhana drugs should be avoided up to a possible limit except in emergency

Sr. No.	Avastha	Age	Wholesome
1	Ksheerapa	Birth to 1 year	Milk
2	Ksheerannada	1 year to 3 year	Milk and Food
3	Annada	3 year to 16 year	Food

Vitiated breast milk is the reason of most of the diseases in Ksheerapa child. Thus a Shuddha (pure and non-vitiated breast milk) breast feeding practices are important.

- The administration of drug in paediatric therapeutics should be in the following way,

क्षिरपस्यौषधं धात्र्याः क्षीरान्नादस्य चोभयोः |

अन्नेन वा शिशौ देयं भेषजं भिषजा सदा || भै. र. ७१/२

Rogavastha	Drug administration
In Ksheerapa	To mother only
In Ksheerannada	To both the baby as well as mother
In Annada	To the baby only

मात्रया लङ्घयेत् धात्रीं शिशोर्नेष्टं विशेषणं |

सर्वं निवार्यते बाले स्तन्यं तु न निवार्यते || भै. र. ७१/३

Langhan should not be performed in a Ksheerapa in any of the clinical condition. If it's needed, controlled

condition. In all other cases, Samana Aoushadha is the best choice.

न त्वेव बालस्य विशेषणं हितं नैवतिसंशोधनरक्तमोक्षणे |

स्निग्धैः सुशीतैर्मधुरैरदाहिभिस्तत्रोपचारोऽशनलेपसेचनैः ||

का. सू. २७/६६

- The following pharmacodynamical properties of drug like- Atisnigdha, Atirooksha, Atyushna, Atyamla, Katuvipak, Atiguru are unsuitable for administration in paediatric cases.

अत्यर्थस्निग्धरूक्षोष्णमम्लं कटुविपाकि च |

गुरु चौशधपानान्न्मेदत् बालेषु गर्हितम् || च. चि. ३०/२८६

- Acharya Kashyapa has given an indication that it may causes toxicity of drugs when used for longer period under the age of 12 years so drugs should be administered in divided dose otherwise child loses his strength and growth gets retarded too.

ऊनद्वादशवर्षाणाम् नैकान्तेनावचारयेत् |

अवचारितमेकान्तेनाहन्यहनि चौषधं || का. खि. ३/५८

- If anything is un-congenial to a child that should be stopped gradually by tapering it off than abruptly discontinuing, because wholesome (Satmya), substances may become Asatmya (unwholesome) after sometime.

Langhan can be administered to the mother. Shoshana Karma is not at all suitable to an infant.

- Shodhana of Dhatri is to be performed when Ksheerada or Ksheerannada gets diseased.

शिशोव्याधौ समुत्पन्ने धत्रिणामेव शोधनम् | का. सि. ३/६

This Shodhana aim at,

- Removing the practical difficulty of applying Shodhana therapy to children.
- As the causative factor is Stanya Dushti, Stanya Shodhana is to be done.

व्याधेर्यधस्यभेषज्यं स्तनस्तेन प्रलेपितः |

स्थितोमुहुर्त धौतोऽनुपितस्तं तं जयेत्गदं || अ.ह.उ. २/७७

For a given disease in children, (if the child is Ksheerapa in age or early neonatal period), the medicine should be prescribed same as to the adults explained in the Samhita. But those medicines should be administered in a different manner that, they should be made in to a paste and apply it on the breast of the feeding mother for a

duration of one Muhurta, and then after the baby can be allowed to suck the breast.

- In dentition period digestive format is in the process of transformation which leads to instability thus being a reason for many diseases. They are usually less severe, thus one should not interfere much as they are usually self-limiting in nature.
- ग्रहरपि हि जायन्ते प्रच्छन्नैव्यार्धयः शिशोः | कर्मशस्तमतस्तेषु दैवयुक्त्याश्रयं सदा || (अ.स.उ. २/५७)

There is several hidden disease (Avyakata or sub clinical features) in children caused by Grahas. So all the disease of children should be treated by both Yuktivyapaasraya as well as daivavyapaasraya Chikitsa.

- Dose schedule has been mentioned in Kashyapa Samhita according to advancing age of child. For ghee it extends from a stone of a plum up to the Aamlaki Matra (fresh Indian gooseberry) and should not exceed than this.^[7]

विडंगफलमात्रं तु जातमात्रस्य देहिनः | भेषजं मधुसर्पिभ्यां मातमानुपकल्पयेत् ||

वर्धमानस्य तु शिशोर्मासे मासे विवर्धयत् | अथामलकमात्रं तु परं विद्वान्न वर्धयेत् ||

(का. सू. १८/१२-१३)

- Acharya Sushruta also mentioned the drug dosages for Ksheerapa, Ksheerannada and Annada child. (सु. शा. १०/३१)

Age	Whom to administer medicine	Dose of drug
Ksheerapa	Mother/wet-nurse	Anguliparva
Ksheerannada	Mother/wet-nurse + Child	Kolasthi
Annada	Child	Kolamatra

शीघ्रं विपाकमुपयाति बलं न हन्यादन्नवृत्तं न च मुहुर्वदन्नान्निरेति |

प्राग्भुक्त्सेवितमौशधमेतदेव दद्धाच्च वृद्धशिशुभीरुवराङ्गनाभ्यः || (हा. स. ३/२)

The ideal bhesaja kaala for the drug administration to the kid is Praagbhakta according to Haritasamhita (Sabhaktam in Ashtanga Samgraha).

PRINCIPLES OF PANCHKARMA THERAPY

Majority of the paediatric disease are Samanoushadha Sadhya. Even drugs with Mridu and Madhyam Veerya act very effectively in children. This can be attributed to their Mridukaayata and Alpaveeryata. Those diseases which persist even after Samana Chikitsa have to be

treated with Shoshana Chikitsa. Panchkarma therapy is the stronger method of elimination of Doshas by removing them out of body. Though it has been mentioned that, stronger medicinal procedures must not be used in children but a modified Panchkarma could be definitely used.

1. Snehana (oleation therapy)

स्निग्ध एव सदा बाला घृतक्षीरनिषेवणात् || (अ. ह.उ. २/३१)

Snehana is optional in Ksheerada and Ksheerannada children as they always remain Snigdha by constant use of Ghrita and Ksheera. By this reference we can say that additional and formal Snehana Vidhi is not required in children especially up to the 2year of age. If at all Snehana becomes essential as in lactation failure, feeding difficulties, etc it can be applied like Achapaan & Vichaarana.

Bahya (external application) as well as Abhyantara (internal) Snehanana has been indicted in children. Small amount of Snehana in children acts as an anabolic (Brihana) in nature also increases general vitality as well as mental capacity. Snehana should be given in very minute quantity to Ksheerapa child due to pre-dominance of Kapha Dosha.

ex. In Bahya Prayoga- Bala Taila Pichu Prayoga, Raaj Taila, Kustha Taila.

In Aabhyantera Prayoga- Kumar Kalyan Ghrit, Samvardhana Ghrit, Brahmi Ghrit.

न स्नेःयेद्गर्भिनिं न प्रसूतां न क्षीरपं नैव दग्धातिवृद्धौ | (का. सू. २२/३०)

Kashyapa told that oleation therapy is contraindicated to the pregnant women, delivered women, infant or milk diet, having received burn.

2. Swedana (sudation therapy)

जन्मप्रभृति बालानां स्वेदमष्टविधं भिषक् | प्रयुञ्जीत यथाकालं रोगदेहव्यपेक्षया ||

हस्तस्वेदः प्रदेहश्च नाडीप्रस्तरसङ्कराः | उपनाहोऽवगाहश्च परिषेकस्तथाऽष्टमः ||

(का. सू. २३/२५-२६)

Acharya Kashyapa told that eight types of Swedana to the children from birth onwards considering the time period and state of the disease and strength of body. Though the Swedana has been said contraindicated in children in usual practice.

Swedana should be performed only after covering the eyes with leaves of Kumuda, Utpal and Padma or a soft cloth.

जातस्य चतुरोमासान् हस्तस्वेदं प्रयोजयेत् | अप्रमादी निवातस्थो विधूमाअग्नयूश्मणा शनैः ||

(का. सू. २३/२७)

षड्बर्षप्रभृतिनां तु पटस्वेदः प्रशस्यते |

(का. सि. ३/१७)

Acharya Kashyap has mentioned milder forms of Swedana as Hasta Swedana (unto 4 month of age) and Pata Sweda (up to 6 years of age).

बालानां कृष्मध्यानां स्वेदचवस्थिको हितः |
शीतव्याधिशरीराणां बालानां च विशेषतः ||

(का. सू. २३/८)

The Avasthik Swedana is beneficial to the initiated and medium built children, especially to the children whose body is seized with the disease of cold (Sheeta Guna Nidanas). It means where ever generalized Swedana is indicated in adults; there we have to do local sudation.

3. Vamana (Emesis) – Generally Vamana is contraindicated in children. Despite this fact, plenty of references can be cited in classical texts as well as in kashyapasamhita indicating Vamana in children.

- It is the first most procedure performed in Jatamatra Paricharya of new-born. Any left-over fluid or mucous present in the oral cavity can be let out by giving ghee & Shendhav Lavan for inducing vomiting.
- अथ जातस्योत्वमपनिय, मुखं च सैन्धवसर्पिषा विशोधयं
| (सु.शा.१०/१४)

Vamana can be administered easily in children due to Kapha Dosha dominance, so Vamana is best for Kapha Rogas of a child. Acharya Kashyapa warns that Vamana is contraindicated in below 6year of age but another expert opinion that if Vamana given to a small kid may cause complication like Kustha, Netraroga, Aruchi etc., so, always give Vamana in kids after 6 years.

- In cases of Vamana being the only option, Sadhya Vamana (Sadhya Snehana + Mridu Vamana)

स्निग्ध एव सदा बाला घृतक्षीरनिषेवणात् | सद्धस्तान्वमनं
तस्मत्पाययेन्मतिमान् मृदु ||

स्तन्यस्य तृप्तं वमयेत् क्षीरक्षीरान्सेविनं | पीतवन्तं तनुं
पेयामन्नादं घृतसंयुक्तं ||

(अ. ह.उ. २/३१-३२)

Prior to Vamana, the stomach of the baby should be filled with breast milk (In Ksheerada & Ksheerannada). In Annada, Laghu and Tanu Peya with Ghee can be used instead of Stanya.

Vasti can be used liberally in children, keeping in mind the specification in dose. Brihatrayis permit the administration of Vasti from 1 year of age. In Kashyapasamhita, this has been discussed in an elaborate manner.

Acharya	Gaargya	Maatara	Aatreya Punarvasu	Parasara	Bhela	Kashyapa
age	From Birth Onwards	After 1 month	4 th month onwards	3 year	6 year	Crawling stage

- स्वयं छर्दयते यस्तु पीतं पीतं पयः शिशुः | न तं
कदाचिद्बाधन्ते व्याधयो देवमानुषाः ||

(का. सि. ३/१२)

The child who himself ejects milk after repeated suckling, to him the Daiva & Manusi disease never afflict.

- While describing Chikitsa of Ksheeralasaka & in Kapha Dushita Stanya Vyadhi, Acharya Vagbhata told that Vamana should be done to both mother and child.

4. Virechana (Purgation) – Virechana should be performed in children as a last resort; all other alternatives failing to cure a disease. This Karma should be administrated with extreme caution as there lies a potent danger of dehydration which the children are highly prone to. However, Mridu Virechana Aoushadha (Trivrit), Sukhvirechna Aoushadha (Chaturungula) can be logistically applied.

द्राक्षारसयुतं दद्याद्दहोदावर्तपीडिते | चतुर्वर्षमुखे बाले
यावदद्वादशवार्षिके || (च. क ८/५)

In Chaturguna Kalpa Adhyaya of Caraka, Mridu Virechana by Aaragvadhya is advised in children of age group between 4-12 years.

- In Kashyapa Vamana Virechana Siddhi Adhyaya, Vridha Kashyapa said that Vamana-Virechana medicines which are to be given to the child of 4th or 8th month should be given mixed with sugar.
- कल्याणकं पिबेत् फक्कः षट्पलं वा यथामृतं | सप्तरात्रात्
परं चैनं त्रिवृत्क्षीरेण शोधयेत् ||
(का. फक्क चिकित्सा)

In Kashyapa Phakka Chikitsa it is said that Snehana in children should be done with Kalyanak Ghрут or Shatpal Ghрут or Amrita Ghрут for 7 day followed by Shodhana with Trivrit Ksheera.

By the above references we can say that Mridu Virechana is indicated in children.

5. Basti (Enema)

शिशुनामशिशूनां च बस्तिकर्मा मृतं यथा | (का.सि. १/९)

Acharya Kashyapa says; in children Vasti Karma likes nectar (Amrita) because due to this work Samsodhana, Samshamana, Samgrahana, Vajikarana, Brumhana, Vali-Palitnashana, Vayah-sthapan also done.

Acharya Kashyapa has fixed criteria to initiate the Basti procedure in a child as follows.

- Child, who has completed neonatal period & able to crawl, sit and stand without support.
- Child, who can take solid food daily or who has started weaning from breast milk.

बस्तयः स्नेहपानानि स्वेदाश्चोद्वर्तनानि च | वातरोगेषु
बालानां संसृष्टेषु विशेषतः ||
(का. चि. १७/४१)

Vasti, oral use of oleaginous substance, sedation and rubbing of unguents especially in children seized with disease of Vata. In any of the disease if Vata Dosha is dominant in the pathogenesis of the disease or disease in chronic state there we can give Vasti treatment.

6. Nasya (elimination of Doshas from nasal pathway)

नस्यकर्मणि बालानां स्तनपानां विशेषतः | कतुलैलं प्रयुञ्जीत
घृत वा सैन्धवन्वितं ||
तेनास्य पच्यते श्लेष्मा श्लेष्मणा न च बाध्यते | (का. सि. ४)

Especially for Ksheerapa child Nasya Karma should be done by Katu Taila or Saindhavyukta Ghrit. This should be continued till complete disappearance of the disease. Drop by drop medicines should be instilled over nostrils and then pinched for some time. This leads to liquefaction of Kapha and therefore, removes the disease. Advocating the use of Nasya to children above 8 year of age might have been done on the basis of understanding the development of Para-nasal sinuses.

- Development of paranasal sinuses continues throughout childhood.
- At birth, only maxillary, ethmoidal and sphenoidal sinuses are formed.
- Radiological presence of frontal sinus appears at 6 year.
- Ethmoidal sinus completely develops by about 17 year of age.
So marshy Nasya is contraindicated below 8 years of age but Pratimarsha Nasya could be given in all age groups.

CONCLUSION

Children are different than adults in many aspects. Thus their diseases manifest differently. Symptoms of these diseases are Avyakata (not fully expressed) and get complicated fast. Thus general guidelines while approaching a sick child are illustrated. Panchkarma are not fully contraindicated but a modified approach regarding its principles has been put forth. It describes all important aspects and principles collectively for treating a sick child.

REFERENCES

1. Kashyap Samhita, Satyapala Bhigacharya, Chaukhamba Sanskrit Sansthan Varanasi 1994, Khilsthan, chapter 3/72, pg.no. 245.
2. Charak Samhita, Acharya Vidhyadhar Shukla, Chaukhamba Surbharti Prakashan Varanasi, 2009, vol.II, Chikitsasthan, chapter 30/282, 284, 285, pg.no. 785-786.
3. Kashyap Samhita, Satyapala Bhigacharya, Chaukhamba Sanskrit Sansthan Varanasi, 1994, Sutrasthan, chap 27/66.
4. Charak Samhita, Acharya Vidhyadhar Shukla, Chaukhamba Surbharti Prakashan Varanasi, 2009, vol.II, Chikitsasthan, chapter 30/286, pg.no.786.
5. Kashyap Samhita, Satyapala Bhigacharya, Chaukhamba Sanskrit Sansthan Varanasi 1994, Khilsthan, chapter 3/58-64, pg.no. 244-245.
6. Charak Samhita, Brahmanand Tripathi, Chaukhamba Surbharti Prakashan Varanasi, 2009, vol.I, Sharirsthana, chapter 8/ 65, pg. no. 981.
7. Kashyap Samhita, Satyapala Bhigacharya, Chaukhamba Sanskrit Sansthan Varanasi 1994, Khilsthan, chapter 3/6, pg.no. 240.
8. Ashtanga Hridaya, Brahmanand Tripathi, Chaukhamba Publications Varanasi, Edition 2007, Uttarsthan chapter 2/77.
9. Kashyap Samhita, Satyapala Bhigacharya, Chaukhamba Sanskrit Sansthan Varanasi, 1994, Sutrasthan, chapter 18/12-13.
10. Ashtanga Sangraha, Edited By Prof. K.R. Shrikant Murthy, Chaukhamba Publications Varanasi, Edition 2009, Uttarsthan chapter 2/31,57.
11. Kashyap Samhita, Satyapala Bhigacharya, Chaukhamba Sanskrit Sansthan Varanasi, 1994, Sutrasthan, chapter 22/30.
12. Kashyap Samhita, Satyapala Bhigacharya, Chaukhamba Sanskrit Sansthan Varanasi, 1994, Sutrasthan, chapter 23/25, 26, 27.
13. Kashyap Samhita, Satyapala Bhigacharya, Chaukhamba Sanskrit Sansthan Varanasi, 1994, Siddhistan, chapter 3/17
14. Ambikadatta Shastri, Sushruta Samhita, Chaukhamba Prakashan, Varanasi; 2014, vol.I, Sharirsthana, chapter 10/14, pg.no.368.
15. Brahmanand Tripathi, Ashtanga Hridaya, Nirmala Hindi Vyakhya, Chaukhamba Publications Varanasi, Edition 2007, Uttarsthan chapter 2/31-32.
16. Satyapala Bhigacharya, Kashyap Samhita, Chaukhamba Sanskrit Sansthan Varanasi, 1994, Siddhistan, chapter 3/12.
17. Caraka Samhita, Acharya Vidhyadhar Shukla, Chaukhamba Surbharti Prakashan Varanasi, 2009, vol.II, Kalpasthan, chapter 8/5, pg. no. 841.
18. Satyapala Bhigacharya, Kashyap Samhita, Chaukhamba Sanskrit Sansthan Varanasi, 1994, Chikitsasthan, chapter 17/22.
19. Satyapala Bhigacharya, Kashyap Samhita, Chaukhamba Sanskrit Sansthan Varanasi, 1994, Siddhistan, chapter 1/9.

20. Satyapala Bhigacharya, Kashyap Samhita, Chaukhamba Sanskrit Sansthan Varanasi, 1994, Chikitsasthan, chapter 17/41.
21. Satyapala Bhigacharya, Kashyap Samhita, Chaukhamba Sanskrit Sansthan Varanasi, 1994, Siddhasthan, chapter 4/11.