

Review Article

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ROLE OF TAILA IN SANDHIGATA VATA

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ABSTRACT

Among various diseases mentioned in classics *vatavyadhi* acquires special importance the disease *sandhigatavata* is one of the *nanatmajavatavyadhi*. The incidence of the illness is most common in old age due to *dhatukshaya*. The disease belongs to *madhyamarogamarga* where in *sandhies* are involved. It is articular joint disease presenting with clinical features like painful joint movements, swelling and limitation of daily activities like dressing, walking, bathing. As it is *nirupastambitavatavyadhi*, *snehana* therapy in the form of *Abhyanga*, *paana* and *basti* plays an important role. Various *tailayogas* are explained for internal and external therapy and these *taila* should be selected as per the stage of the illness, *doshic* predominance and as per the *agni*.

Keywords: Sanadhigatavata, Dhatukashaya, Osteoarthritis, Bahyasnehan, Abhyantarsnehana, Abhyanga,

INTRODUCTION

Janusandhigatavata is caused due to vitiation of vatadosha in joints. It is a condition of Gatavata where in vyanavata afflicts asthi sandhi¹. Lakshanas of janusandhigatavata are pain swelling, vatapurnadritisparsh, restricted movement of joints. These clinical findings simulate with the disease Osteoarthritis, a chronic degenerative inflammatory disease which has a great impact on quality of life.

It is the second most common musculoskeletal problem in the world population (30%) after back pain (50%). Osteoarthritis is one of the 10 most disabling diseases in developed countries². Osteoarthritis is explained as "Global Disease Burden" by WHO. Main characteristic features of disease are *sandhishoola*, sandhishotha and sandhigraha. This disease mainly afflicts the knee joint of old age and obese group of people. Sandhigatavata is mainly a dhatukshavajanyavatavyadhi, for sandhigatavata treatment modalities like snehan, swedan, basti, agnikarma are explained. Snehana is explained one among shadvida upakramas³ and snehana is indicated for nirupastambhavatavyadhi. Among the four sneha i.e. sarpi, taila, vasa and majja, taila is considered as the best sneha for sandhigatavata because sandhigatavata is vatapradhanadhatukshayajavatavyadhi having increased rukshata, kharata, shoola and stamba. Taila having opposite quality i.e. marutaghna, balavardhana, ushnata, sthirikarana which helps to subside vata dosha⁴. So different taila prayoga in sandhigatavata plays prime role. In Pathya prayoga madhura, amla, lavana rasa pradhan ahara along with snigdha ahara are the best.

Sneha in therapeutics

Sneha exhibits the qualities of *Snigdha*, *guru*, *shita*, *mrudu*, *drava*, *picchila*, *sara*, *manda*, *sukshmaguna*. It is used for *dheergayu*, prevention of diseases and maintenance of the health of a healthy person. Different *snehas* are explained for therapeutic purpose and they are classified into *sthavara sneha* and *jangamasneha* as per the origin⁵.

Sthavara sneha are obtained from plant seeds like *sar-shapa taila, tilataila* etc. Among all *taila, tilataila* is considered as best one⁶. *Tilataila* is used as the base for preparing many medicated oil. *Jangama sneha* is obtained from animal. E.g. *navaneeta, ghrita, majja*.

Ghrita exhibits the quality of vatapittahara⁷ does not increase kaphadosha, does agnideepana, chakshushya, prajakam, rasayana and increases the intellectual power. Taila is best in vatavyadhies. It imparts the qualities of twachya, snigdha, shlakshna, tanutwak, medaska, laghutwam, vatakaphanashaka. Vasasneha is obtained from the mamsa, preferably given in teekshnaagni person vatamargavaran, to whom vasa is satmya, yonishula, vishapidita, bhagnaroga, karnashula, daily who are doing vyayama. Majjasneha is obtained from bone marrow. And it takes little more time to digest as it is guru in nature. It has benefit of balavardhana, rasa and shukravardana, shleshma, meda and majjavardana, and increases digestive function, good for krurakosta person and vatadosha.

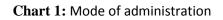
Table 1: List of *taila* mentioned in classics:

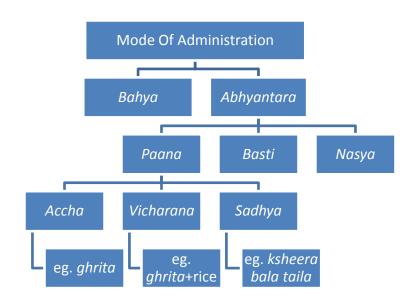
Sl. No.	Name	Rogadikara/ indication	Reference	Mode of administration
1.	Tila taila ⁸	Tailaguna / Sarvavataroga	<i>Y. R.</i>	Bahyaand abhyantar
2.	Mahavishagarbha taila ⁹	Vatavyadhi / sarvavataroga	B.R.	Abhyanga
3.	Vishagarbhataila ¹⁰	Vatavyadhi	<i>B.R.</i>	Abhyanga,
4.	Prasarinitaila ¹¹	Vatavyadhinidanam/ gridrasiardita	<i>Y. R</i>	Abhyanga
5.	Saindhavadhyataila ¹²	Amavata/ sarvavatavikaara	<i>B. R</i> .	Abhyanga,basti, virechan
6.	Nakulataila ¹³	Vatavyadhi	<i>B. R</i>	Abhanga
7.	Siddhartakataila ¹⁴	Vatavyadhi / sandhigatavata	B.R	Abhyanga
8.	EkadashatikaPrasirinitaila ¹⁵	Vatavyadhi	B.R	Abhyanga
9.	Vishnu taila ¹⁶	Vatavyadhi / sandhigatavata	<i>B. R.</i>	Abhyanga
10.	Narayana taila ¹⁷	Vatavyadhi	Chakradatta	Pana, Abhyanga, bhojana
11.	Masha balataila ¹⁸	Vatavyadhi chi / sarvavataroga	Chakradatta	
12.	Moolakadya taila ¹⁹	Vatavyadhi chi / sarvavataroga	Chakradatta 22/146	Pana
13.	Tritiya masha taila ²⁰	Vatavyadhi chi / janurujashoola	Chakradatta 22/162	Abhanga,basti
14.	Saptaprasthabrihanmasha taila ²¹	Vatavyadhi chi / sarvavataroga	Chakradatta 22/165	Pana, Abhyanga, basti
15.	Trishatiprasarini taila ²²	Vatavyadhi chi / sandhigatavata	Chakradatta 22/215	Abhyanga
16.	Prabhanjanavimardana taila ²³	Tailaprakarana / sarvavataroga	Sahasray- oga 3/7	Abhyaga,
17.	Karpasathyadi taila ²⁴	Tailaprakarana / sarvavataroga	Sahasray- oga 3/15	Pana, navana, Abhyanga
18.	Tintriniswarasadi taila ²⁵	Tailaprakarana / sarvavataroga	Sahasray- oga 3/33	Abhyanga
19.	Dashamoola taila ²⁶	Tailaprakarana / sandhigataroga	Ayurveda	Abhyanga

			sarasan- graha	
20.	Brihatsaindhavadi taila ²⁷	Tailaprakarana / sandhi shoola, jaanushoola	Ayurveda sarasan- graha	Pana, Abhyanga
21.	Chinchadi taila ²⁸	Tailaprakarana / sarvavataroga	Ayurveda sarasan- graha	Basti, abhyanga
22.	Vishatinduka taila ²⁹		Rasa- tarangini	Abhyanga
23.	Kottumchukkadi taila ³⁰	Vataroga	sahasrayoga	Abhyang
24.	Vijayabhairav taila ³¹	Sarvavataroga	sahsrayog	Abhanga
25.	Lakshadi taila ³²	Balya	sahasrayoga	Abhyanga
26.	Murivenna taila ³³			Abhyanga
27.	Anutaila ³⁴	Greevashushkata	AstangaHri- daya	Nasya
28.	Ksheerabalataila ³⁵	Vataroga,	AstangaHri- daya	Abhyanga
29.	Dhnvantara tail ³⁶	Vataroga,pakshavadha, sar- vangavata	Vaidyayogar atnavali	Abhynga and dhara.
30.	Parinatakeriksheeradyataila ³⁷	Vatavyadhi/Apabahuka	Sahasrayog.	Nasya and abhyanga
31.	Baladhatryadi taila ³⁸	Vataroga	Sahasrayog	Abhyanga nasya
32.	Balashwagandhalakshadi taila ³⁹	Vataroga	Sahasrayog	Abhanga
33.	Brahatmasha taila ⁴⁰	Vatavyadhi, avabahuka,vishwachi	Bhaisha- jyaRatnavali	Basti,abhanga,nasya.
34.	Sahacharaditaila ⁴¹	Vataroga	AstangaHri- daya	Abhyanga

Sneha is administered in different routes for therapeutic purpose i.e. bahya and abhyantaar⁴². In bahya sneha lepa, mardana, snehaavgaha, and parisheka are explained. Snehapaana, basti, nasya are included in abhyantara snehapana. Snehapana can be done in the form of acchasneha, vicharanasneha and sadyasneha. Internally snehan is administered for the purpose of shaman, shodhan or bramhan. For brimhana⁴³ effect sneha is administered along with different dishes, about 10 to 20 ml of ghrita is mixed with food, like in rice or other food preparations, in sandhigatavata orally ksheerabala tail is given as it reduces the rukshata and stamba. Shodhanangsneha⁴⁴ is given for dosha utklesha and to bring doshas from shakha to kosta. The basic unit of any living being is cell. The primary aim with snehapan is to make sure that all the cells in the body are saturated with so much fat that its

ready to expel everything out at first chance and in the process flushing out toxins as well, once the cell expels the fat plasma level increases and to maintain the normal equilibrium, excess plasma level increases and to maintain the normal equilibrium the excess plasma is transported back to the GIT. Administration of vamana or virechana at this stage will complete the detox or shodhana process. Many research works have been conducted on reduction high lipid profile by shodhananga snehana therapy. In Shamanangasneha⁴⁵ for doshashaman purpose sneha is administered in less quantity of madhyamamatra of sneha during annakaala in empty stomach when person feels hungry. Shamanasneha normalizes the aggravated doshas without disturbing normal doshas. Internally when ghrita is administered in shamnanga sneha it may reach upto stem cells present in stratum basalis and may reduce the proliferation rate by acting as *vatashamaka*. *Ksheerabalataila* is given as *shama-nangasneha* in *vatavyadhi* like e.g. *sandhigatavata* and *dhatukshayajvatavyadhi*.





Taila is applied differently according to the different anatomical structure like murdhnitaila, nasatarpana, nasapoorana, akshitarpana, gandoosha, kavala, Abhyanga, lepa, mardana, padaagata, snehaavgaha, udvartana and parisheka. Snehana has the effect of vishyandan, kledana, mardavakara.

Mode of action of Abhyanga

The seat of *vatadosha* is *twacha* and the qualities of *vatadosha* is *ruksha*, *sheeta* etc. and qualities of *taila* are *vatahara* and it is not going to aggravate *kaphadosha*, gives strength to the body along with lustre to the skin. *Ushnaguna* having the opposite quality of *vatadosha* helps to relieve from stiffness

caused by *sheetaguna* of *vata*. Due to *sookshma guna* it easily penetrates all the *srotas*. Due to its *sara* and *dravaguna* it helps in the liquefaction of the *doshas*. Among all *taila*, *tilataila* is considered as best⁴⁶ Abhyanga direction improves the blood circulation, helps to remove toxins from the tissue and improves the function of the musculo-skeletal system. *Bhrajaka pitta* having the function of *Deepana* and *pachana* which is seated on skin helps in the digestion of *sneha* which is applied on knee joint in circular direction thus enters the *romakoopa* and *srotas*. By this it shows systemic action of *taila* on external application.

Table 2: Penetration of taila in different matra kala

Sl no.	Dhatu	Matra kala	Time in seconds
1.	Romakoopa	300	96
2.	Twacha	400	128
З.	Rakta	500	160
4.	Mamsa	600	192

5.	Meda	700	224
6.	Asthi	800	256
7.	Majja	900	288

So, the oil applied on the skin enters the deeper structures of the body in about 288 seconds or approximately 5 min⁴⁷. By doing Abhyanga arterial and venous and lymphatic blood flow to the skin and muscles is increased, softens the skin, and stimulates the nerve endings. Expels the metabolic waste product from the body and reduces the swelling and by snehana pain and swelling will be reduced and helps in movement of body and joint. As it is jaranashana property abhvanga is advised daily as a part of dinacharya⁴⁸. So, the Simile of stick is told that we can soften the hard stick by dipping it in oil similarly stiffness of the joint is reduced and helps for easy movement of the joint and body. And tonicity of the muscle is maintained. And dryness of the skin will be reduced by snehana therapy.

Principles of drug absorption to the skin is explained that, A topical drug aims at providing high concentration of the drug at the site of application with the minimal systemic absorption, to avoid systemic adverse effects. Therapeutic effects depend not only on pharmacological properties of the active drug but also on physical properties of the vehicle.

Absorption of the drug depends on the partition coefficient of the drug between the vehicle and stratum corneum, which depends upon lipid solubility of the drug. The state of hydration of the stratum corneum, drug concentration in the vehicle and thickness of the skin, thicker the skin lowers the drug penetration⁴⁹. This is important as the thickness of the skin varies in the different regions of the body and with the age. Oil applied on the skin will help to retain the water in the skin

There are three major mechanisms by which oil absorption occurs these are, through the transcellular absorption chemical is transferred through the keratin packed corneocytes by partitioning into and out of the cell membrane. And by intercellular absorption chemical is transferred around the corneocytes in the lipidrich extracellular regions and by appendageal absorption chemical bypasses the corneo-cytes, entering the shunts provided by the hair follicles, sweat glands, and sebaceous glands.

Basti Chikitsa: Here the medicine is administered through the rectal route and basti is classified as niruha and anuvasana basti⁵⁰. In anuvasana basti sneha is the main ingredient of the basti so it is also called as snaihikabasti, this basti will not produce the diseases even after longterm administration and as per the dose it can be administered in three forms i.e. snehabasti it is one fourth quantity of niruhabasti i.e. six pala. In anuvasanbasti dose of the sneha is half of the snehabasti is used i.e. three pala and in matrabasti one and half pala of sneha is used i.e. dose is half of anuvasan basti⁵¹. In nirupastambhitavatavyadhi snehabasti is routinely practiced, because it has opposite qualities to vatadosha and it does snehana to the body like bramhanbasti increases rasadi dhatu in the body dashamuladi anuvasanbasti which is mainly prepared out of vasa of anupamamsa and kalka of jeevaniyagana oushadhies is given in vatarogas, shatahwadianuvasanabasti in vatarogas, and for balavardanjeevantyadianuvasanabasti is used. And for vatashamanghritabasti is used, chandanadibasti for pittashaman. Panchatiktaguggulughritamatrabasti is most practiced in sandhigatavata, as it is madhyamarogamargavyadhi where in asthi and vatadosha are afflicted mainly and for asthidhatu impairment tikta and dravyasnigdhadravyas plays an important role. Tikta rasa is predominant in vavu and aakashamahabhuta so it has got affinity towards asthi.

In niruha basti⁵² kwathadravyas are administered through the rectal route and specially given in avaran conditions. Niruhabasti is classified into utkleshanabasti where in doshautklesha and liquefaction of dosha and malas are observed. Shodhanabasti, lekhanabasti, shaman, brimhana, karshana and rasayanbasti. Examples are lekhanabasti in sthoulya, erandamuladiniruhabasti in gridrasi, ksheerabasti in vatarakta, vaitaranabasti in amavata, sahacharadibasti in gridrasi, baladyabasti in vridda and durbala persons, panchamuladibasti for balavardan, mustadiyapanabasti in janujanghagatavyadhies and vatarakta, adman and ksheerabasti in vatarakta.

Probable mode of action of *basti*

Action of basti depends on the ingredients. The main ingredients of niruhabasti includes saindhava, makshika, sneha, kalkaandavapa. Due to sukshma and teekshnaguna of saindhavalavan it can easily enter the srotu sand breaks the doshasanghata. Singdhaguna of snehadravya protects mucus membrane and helps for liquefaction of doshas, produces snigdhata. Honey forms homogenous mixture with saindhava and it is easily absorbed in the body. Kalka, kwatha and avapadravyas are selected as per the doshadushya predominance so it helps in sampraptivighatana. The given basti will reach nabhipradesha, kati, parshwa, kukshi, and the veerya of basti spread throughout the body and will churn the doshachaya and mala chaya and expel out purisha and dosha completely without any complications. Veerva of the medicine is carried by vatadosha through the siras and spread throughout the body. Veerva of given basti is immediately transferred to apanavata, from apana to samana, thus to vyana and then to udana and then to prana. Then the veerya reaches to pitta sthana and kaphasthana and bring them back to normalcy. The given basti will reach nabhipradesha, kati, parshwa, kukshi, and the veerya of basti spread throughout the body and will churn the doshachaya and mala chaya and expel out purisha and dosha completely without any complications. Similarly, how the sun evaporates the water from the earth by his rays in the similar way basti in the *pakwashaya* drags the *doshas* from whole body by its ushna and teekshnaguna. Anuvasanbasti does nourishment of the whole-body simile given for this basti is by watering the roots of plant whole plant is nourished.54

As per the modern science mode of action of *basti* is explained by four mechanisms⁵⁵, administered *bastidravya* will penetrate through the epithelial cells, and phytochemicals in *basti dravyas* absorbed into systemic circulation. Certain hypothesis can be postulated like absorption mechanism, neural chemical and mechanical stimulation, Administered bastidravya will penetrate through the epithelial cells of GIT and absorbed into systemic circulation, niruhabasti is hyper osmotic solution which causes movement of solvent from cells of colon to the lumen containing bastidravya facilitates the absorption of endotoxin and produce detoxification during elimination. basti has got irritant property along with other ingredients which may induce colonic distension. The distension stimulates pressure which produces evaculatory reflex. The sigmoidal, rectal and anal regions of large intestine are considerably better supplied with parasympathetic fibers than other part of intestine. Even though the basti given is expelled out immediately as such or mixed with feces, the veerya of basti is spread throughout the body by vata. From this it can be understood that the action of *basti* is possible through nervous stimulation so that within seconds itself the action of basti is spread. Certain mechanical and chemical stimulation is responsible for the action of basti. Both cause nervous stimulation and there produces the effect.

Mode of action of Nasya

Nasa is the portal gateway of *shira*⁵⁶, *nasa* being the doorway to*shira*, *andshiras* is the main seat for *indriyas*, so the diseases where *adhistan* is *shiras* there all *nasya* plays a vital role. The drug administered through nostrils, reaches *shringhataka* by *nasa* and spreads in the *murdh*a taking route of *netra*, *shrotra*, *siramukha* and scrapes the morbid *dosha* in supra clavicular region and expels them from the *uttamanga*.

As per modern science⁵⁷, nasal route is easily accessible, convenient and reliable with a porous endothelial membrane and a highly vascularized epithelium that provides a rapid absorption of compounds into the systemic circulation, avoiding the hepatic first pass elimination. The nasal tissue is highly vascularized making it a good site for rapid and efficient site for absorption. Olfactory nerve is chemoreceptor in by nature. It is known that through olfactory pathway this nerve relates to limbic system and hypothalamus which are having control over endocrine secretions and hypothalamus stimulate the higher centers of brain which shows action on regulation of endocrine

and nervous system. And the diffusion of the drug is through mucus Drug administered through the nasal cavity rapidly transverse through the cribriform plate into the CNS by three routes directly by olfactory neurons, through supporting cells and the surrounding capillary bed, directly into the cerebro-spinal fluid (CSF). Some of the examples of *nasya* in *vatavyadhi*, *karpasastyaditailanasya* in *greevastambha*, *naavananasya in ardita*.

Some research works:

- 1. Application of *NirgundiTaila* along with internal administration of the same has a considerable reduction in the pain and inability to perform joint movements
- 2. *NirgundiTaila* has shown the preventive effect on the development of formaldehyde-induced experimental arthritis.
- 3. Studies have revealed that the lipid medium is highly suitable for penetration of the drug molecule through stratum corneum on this basis; it can be assumed that the oil used in *Nirgundi Patra Upanaha* serves as a lipoidal medium for penetration of drug molecules and exerts an immediate anti-inflammatory effect.
- 4. A comparative study using orange oil/ginger oil for a massage with olive oil as control conducted in Hong Kong showed a significant reduction in knee pain, stiffness, and enhanced the physical function of the joint.
- 5. *Karpasastyaditailanasya* in cervical spondylosis a case study was done
- 6. Laghumashataila in apabahuka
- 7. Parinatakeriksheeraditaiala nasya in apabahuka
- 8. Janubasti with mahanarayan tail and naadisweda in janusandhigatavata
- 9. Anuvasana basti with ksheerabala taila in sandhigatavata, a study was conducted on 30 patients of janusandhigatavata.
- 10. Hapushadiyapanabasti in sandhigatavata.
- 11. Erandamuladiyapanbasti in lumbar spondylosis.

CONCLUSION

Taila has madhura, tikta, kashayarasa, tikshna, guru snigdha, vikasi and sara gunas and ushnaveerya and madhurvipakavatahar not increases kaphadosha. Karmas are krimihar, sthirikar, tvachya, balakara, vonivishodhaka and it is best administered in pravrita and sheetakaal. Taila is explained as best in vatavydhi (nirupastambhavatavyadhies), different taila should be selected as per the avasthavishesha and doshavishesha of the vatavvadhi, and these tailas can be administered in abhyantara or bahya form. Taila exhibits the qualities of teekshna, vyavayiguna, sukshmasrotogami, by giving sanskar to taila it can be used in both krisha and sthoola persons. It is best vatahara among all chatusnehas, it increases bala of the person suffering with vatavyadhi. Purana of rikta srotus will be done by taila by its snigdhaguna, so taila plays vital role in vatavyadhi as a preventive and therapeutic effect. In dinacharyataila abhyanga is included to prevent jarajanyavyadhies and to prevent diseases like sandhigatavata.

REFERENCES

- 1. Agnivesha, Charaka Samhita Ayurveda Deepika Commentary of Chakrapani Edited by Acharya Trivikrama Yadava Sharma 2004, Chaukambhasurabharathiprakshana. Pp-738, Page No-617.
- G.S Sainani, API TextbookOfMedicine.6th Edition. Mumbai: The Association of India. 1999; P 1151
- Agnivesha, Charaka Samhita, Sutrasthana, Chapter 22, Verse 15, Ayurveda Deepika Commentary By Chakrapanidatta. Editor: YadavajiTrikamaji Acharya. Choukambha Surabharati Prakashana Varanasi. Edition 2016; P.120.
- Charak Samhita Revised By Charaka And Driddhabal With Ayurved–Dipika Hindi Commentary Edited By Pandith Rajeshwara Data Shastri, Chaukhamba Bharati Academy, Varanasi (India) Edition Reprint – 1998 Part1Suthrasthana Pg. No.255
- Sushruta, Sushruta Samhita; Nibhandasangraha Commentary By Dalhancharya. Edited ByVaidya Jadhavaji Trikamaji Acharya. Published By Chaukambha Orientalia Reprint Edition: 2014.Chikitsa Sthana 31/4.P507
- Yogaratnakara Hindi Commentary ByVaidya Laxmipatishastri, Chowkamba Sanskrit Samsthan, Edition 1999, Pg No. 107

- Agnivesh, Charaka Samhita, Revised By Charaka And Dridabal. Ayurveda Dipika Commentary Of Chakrapanidatta; Edited By Vaidya Jadhavaji Trikamaji Acharya, Published By Chaukambha Sanskrit Sansthan, Varanasi2001 Sutrasthan, 13/14, P.82
- Yogaratnakara, Hindi Commentary By Vaidya Laxmipatishastri, Chowkamba Sanskrit Samsthan, Edition 1999, Pg No. 107
- Bhaishaya Ratnavali By Vaidya Shree Ambika Data Shastry, Volume II, Published By Chaukambha Sanskrit Sansthan, Varanasi, Edition 2009, Pg. No. 233
- Bhaishaya Ratnavali By Vaidya Shree Ambika Data Shastry, Volume II, Published By Chaukambha Sanskrit Sansthan, Varanasi, Edition 2009, Pg. No. 232
- Yogaratnakara Hindi Commentary ByVaidya Laxmipatishastri, Chowkamba Sanskrit Samsthan, Edition 1999, Pg No. 532
- 12. BhaishayaR atnavali By Vaidya Shree Ambika Data Shastry, Volume II, Published By Chaukambha Sanskrit Sansthan, Varanasi, Edition 2009, Pg. No. 320
- 13. Bhaishaya Ratnavali By Vaidya Shree Ambika Data Shastry, Volume II, Published By Chaukambha Sanskrit Sansthan, Varanasi, Edition 2009, Pg. No. 222.
- 14. Bhaishaya Ratnavali By Vaidya Shree Ambika Data Shastry, Volume II, Published By Chaukambha Sanskrit Sansthan, Varanasi, Edition 2009, Pg. No. 221.
- 15. Bhaishaya Ratnavali By Vaidya Shree Ambika Data Shastry, Volume II, Published By Chaukambha Sanskrit Sansthan, Varanasi, Edition 2009, Pg. No. 195.
- Bhaishaya Ratnavali By Vaidya Shree Ambika Data Shastry, Volume II, Published By Chaukambha Sanskrit Sansthan, Varanasi, Edition 2009, Pg. No. 186
- Chakradatta Edited By Acharya Ramanath Dwivedi, Commentary By Dr Indradeva Tripati, Published By Chowamba Sanskrit Samsthan Varanasi, Edition 1997, Pg. No. 143.
- Chakradatta Edited By Acharya Ramanath Dwivedi, Commentary By Dr Indradeva Tripati, Published By Chowamba Sanskrit Samsthan Varanasi, Edition 1997, Pg. No. 142.
- Chakradatta Edited By Acharya Ramanath Dwivedi, Commentary By Dr Indradeva Tripati, Published By Chowamba Sanskrit Samsthan Varanasi, Edition 1997, Pg. No. 145.
- Chakradatta Edited By Acharya Ramanath Dwivedi, Commentary By Dr Indradeva Tripati, Published By Chowamba Sanskrit Samsthan Varanasi, Edition 1997, Pg. No.146.

- 21. Chakradatta Edited By Acharya Ramanath Dwivedi, Commentary By Dr Indradeva Tripati, Published By Chowamba Sanskrit Samsthan Varanasi, Edition 1997, Pg. No. 147.
- 22. Chakradatta Edited By Acharya Ramanath Dwivedi, Commentary By Dr Indradeva Tripati, Published By Chowamba Sanskrit Samsthan Varanasi, Edition 1997, Pg. No. 150.
- 23. Sahasrayogam By Dr. K. Nishteshwar, ChowkambaSanskrit Series Office, Edition 2014, Taila Prakarana, Pg No. 113.
- 24. Sahasrayogam By Dr. K. Nishteshwar, Chowkamba Sanskrit Series Office, Edition 2014, Taila Prakarana, Pg No 118.
- 25. Sahasrayogam By Dr. K. Nishteshwar, Chowkamba Sanskrit Series Office, Edition 2014, Taila Prakarana, Pg No. 129.
- 26. Ayurveda Sarasangraha By Shree Vaidyanath, Published By Ayurveda Bhavan Limited, Cuclutta, Edition 2012, Taila Prakarana, Pg No 686.
- 27. Ayurveda Sarasangraha By Shree Vaidyanath, Published By Ayurveda Bhavan Limited, Cuclutta, Edition 2012, Taila Prakarana, Pg No 701.
- 28. Sahasrayogam By Dr. K. Nishteshwar, Chowkamba Sanskrit Series Office, Edition 2014, Taila Prakarana, Pg No 114.
- 29. The Ayurveda Formulatory Of India, Part I, Second Edition, Published By The Controller Of Publications, Civil Lines, Delhi Re-Print 2003. Pg. No. 55.
- The Ayurveda Formulatory Of India, Part I, Second Edition, Published By The Controller Of Publications, Civil Lines, Delhi, Re-Print 2003. Pg. No. 132.
- Sahasrayogam By Dr.K. Nishteshwar, Chowkamba Sanskrit Series Office, Edition 2014, Taila Prakarana, Pg No. 411
- 32. The Ayurveda Formulatory Of India, Part I, Second Edition, Published By The Controller Of Publications, Civil Lines, Delhi, Re-Print 2003. Pg. No. 151.
- Pharmacopeia, Publication Division; Government Ayurveda College Trivandrum
- The Ayurveda Formulatory Of India, Part I, Second Edition, Published By The Controller Of Publications, Civil Lines, Delhi, Re-Print 2003. Pg. No. 128
- 35. The Ayurveda Formulatory Of India, Part I, Second Edition, Published By The Controller Of Publications, Civil Lines, Delhi, Re-Print 2003. Pg. No. 132
- 36. The Ayurveda Formulatory Of India, Part I, Second Edition, Published By The Controller Of Publications, Civil Lines, Delhi, Re-Print 2003. Pg. No. 137

- The Ayurveda Formulatory Of India, Part I, Second Ediytion, Published Bythe Controller Of Publications, Civil Lines, Delhi, Re-Print 2003. Pg. No. 139
- The Ayurveda Formulatory Of India, Part I, Second Ediytion, Published Bythe Controller Of Publications, Civil Lines, Delhi, Re-Print 2003. Pg. No. 143
- The Ayurveda Formulatory Of India, Part I, Second Edition, Published By the Controller Of Publications, Civil Lines, Delhi, Re-Print 2003. Pg. No. 144
- 40. The Ayurveda Formulatory Of India, Part I, Second Edition, Published By The Controller Of Publications, Civil Lines, Delhi, Re-Print 2003. Pg. No. 146
- 41. The Ayurveda Formulatory Of India, Part I, Second Edition, Published By The Controller Of Publications, Civil Lines, Delhi, Re-Print 2003. Pg. No. 145
- 42. Sushruta, Sushruta Samhita; Nibhandasangraha Commentary By Dalhancharya. Edited ByVaidya Jadhavaji Trikamaji Acharya. Published By Chaukambha Orientalia Reprint Edition: 2014.Chikitsa Sthan 31/4. P507
- Vaghbhata Astanga Hridaya; SarvangaSundari Teeka By Arunadatta. Edited By P.V.Sharma Published By Chaukambha Orientalia Varanasi. 9th Edition 2002.Sutrasthan 16/20 P 248
- Vaghbhata Astanga Hridaya; Sarvanga Sundar Teeka By Arunadatta. Edited By P.V. Sharma Published By Chaukambha Orientalia Varanasi.9th Edition 2002.Sutrasthan 16/19. P 247
- 45. Vaghbhata Astanga Hridaya; Sarvanga Sundar Teeka By Arunadatta. Edited By P.V. Sharma Published By Chaukambha Orientalia Varanasi. 9th Edition 2002.Sutrasthan 16/19. P 247
- 46. Agnivesha Charak Samhita Revised By Charaka And Driddhabal With Ayurved–Dipika Hindi Commentary Edited By Pandith Rajeshwara Data Shastri, Chaukhamba Bharati Academy, Varanasi (India) Edition Reprint – 1998-Part1Suthrasthana Pg. No.256
- 47. Sushruta, Sushruta Samhita; Nibhandasangraha Commentary By Dalhancharya. Edited ByVaidya Jadhavaji Trikamaji Acharya. Published By Chaukambha Orientalia Reprint Edition:2014. Chikitsa Sthan 24/30 P488
- Vaghbhata Astanga Hridaya; Sarvanga Sundar Teeka By Arunadatta. Edited By P.V. Sharma Published By Chaukambha Orientalia Varanasi. 9th Edition 2002.Sutrasthan 2/8 P 26
- Satoskar, Kale, Bhandarkar. Pharmacology And Pharmacotherapetics. Edited By R.R. Satoskar.16th Edition. 1999; Mumbai Popular Prakashan. PgNo 827
- 50. Sushruta, Sushruta Samhita; Nibhandasangraha Commentary By Dalhancharya. Edited By Vaidya Jadhavaji

Trikamaji Acharya. Published By Chaukambha Orientalia Reprint Edition: 2014. Chikitsa Sthan 35/18 P 526

- 51. Agnivesh, Charaka Samhita, Revised By Charaka And Dridabal. Ayurveda Dipika Commentry Of Chakrapanidatta; Edited By Vaidya Jadhavaji Trikamaji Acharya, Published By Chaukambha Sanskrit Sansthan, Varanasi 2001 Siddhisthan4/54 P 931
- 52. Sushruta, Sushruta Samhita; Nibhan dasangraha Commentary By Dalhancharya. Edited ByVaidya Jadhavaji Trikamaji Acharya. Published By Chaukambha Orientalia Reprint Edition: 2014.Chikitsa Sthan 35/18 P 526
- 53. Sushruta, Sushruta Samhita; Nibhandasangraha Commentary By Dalhancharya. Edited By Vaidya JadhavajiTrikamaji Acharya. Published ByChaukambha Orientalia Reprint Edition:2014. Chikitsa Sthana 35/26 P 527
- 54. Agnivesh, Charaka Samhita, Revised By Charaka And Dridabal. Ayurveda Dipika Commentary Of Chakrapanidatta; Edited By Vaidya Jadhavaji Trikamaji Acharya, Published By Chaukambha Sanskrit Sansthan, Varanasi2001 Siddhisthan, 1/31p 884
- Subina Et. Al. Understanding The Mode Of Action Of Basti Karma (Medicated Enema). AAMJ 2015; I: 267-74
- 56. Vaghbhata Astanga Hridaya; Sarvanga Sundar Teeka By Arunadatta. Edited By P. V. Sharma Published By Chaukambha Orientalia Varanasi.9th Edition 2002.Sutrasthan 20/1.P 287
- Probable Mode Of Action Of Nasya An Overview, By Smitha Lokhande. IAMJ 2016; Volume 4; Issue 03; Pg. No. 359-364

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