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Management of *Ekakushta* (Psoriasis) through *Panchakarma*: A Successful Case Report

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ABSTRACT

Twak rogas (Skin diseases) are becoming more common due to mithya ahara and vihara (improper food and lifestyle). In Ayurveda, the word “kushta” includes all the diseases related to twak (skin). Among them, few common diseases are ekakushta, dadru, vicharchika, etc. Here is a case report of a case of ekakushta (psoriasis) treated with selected panchakarma chikitsa (eliminative procedures) and later to avoid recurrence, was administered with shamanoushadhis (palliative medications) and rasayana chikitsa (rejuvenatives).

KEYWORDS

Ekakushta, Psoriasis, Panchakarma



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INTRODUCTION

Skin being the largest organ, is frequently exposed to the minute changes in the surrounding environment. Psoriasis is one such skin disease which has effect on physical, psychological and social aspects of life. It is a maculo-papular disease predominantly seen in second to fourth decade of life. The features of ekakushta and psoriasis mimic each other. Ekakushta is a kshudra kushta, vata-kaphaja kushta having features like aswedanam (absence of sweat in the area of lesions), mahavastu (lesion covering large surface area), matsyashakalopamam (scaly, flaky lesions).

AIMS AND OBJECTIVES

1. To assess the effectiveness of virechana in the management of ekakushta.
2. To assess the effectiveness of vamana in the management of ekakushta.

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MATERIALS AND METHODS

It is a single-arm, open-labelled case report of a subject of ekakushta (psoriasis) who was treated with virechana (therapeutic purgation) initially, vamana (therapeutic emesis) was conducted three months later after attaining samyak bala,

shamanoushadhis (palliative medications) was administered for every 15 days after proper assessment and rasayana (rejuvenatives) was planned for dhatu poshana and bala vardhana..

A CASE REPORT

HISTORY:

A 32-year-old male subject agriculturist by profession came with the chief complaints of flaky reddish white lesions all over the body including scalp since 3 years. Clinical features like pruritus and peeling off of the skin was also observed. Patient was apparently normal 3 years back. One day he observed a small lesion over the scalp which he neglected and the lesion got subsided by itself. After 4 days, there were multiple lesions all over the scalp. He also noticed itching in those lesions. After itching there was peeling off of the greyish skin in those areas of lesions. For these complaints he consulted physician (details of medications unknown) where he got relieved from symptoms. After 3 months, again there were lesions over the scalp along with lesions over the face. He consulted the same physician but got no relief in symptoms. He then consulted other physician (details of medications unknown) where he got relieved from symptoms. Since past 1 year, there was proliferation of



lesions over both the hands. Later, the lesions spread over the abdomen and legs. Then he consulted other physician (details of medications unknown) where the symptoms got aggravated. He had severe itching over these lesions followed by peeling-off of the greyish skin. On severe itching, he noticed colourless fluid (discharge) oozing out from these lesions followed by oozing of little blood along with slight elevation and burning sensation in the area surrounding the lesions. Past 1 week itching and peeling off of the skin has aggravated. As a result of excessive rookshata (dryness) there was restricted range of movements.

AGGRAVATING AND RELIEVING FACTORS:

Aggravating factors include winter season, intake of non-vegetarian diet, other food items like potato, brinjal, etc.

Relieving factors include application of oil over the lesions, following vegetarian diet as a result of which he would get mild relief from itching sensation.

PERSONAL HISTORY:

- 1)Bowel: Passing of hard stools on alternate days
- 2)Appetite: Decreased
- 3)Micturition: Normal, no relevant complaints
- 4)Sleep: Disturbed due to itching

5)Weight: 46 kg. There was 4 kg reduction in the span of 30 days.

6)Diet: Mixed

7)Habits: Nil

EXAMINATION:

Ashta vidha pareeksha:

- 1)*Nadi*(pulse): *kapha-vata*;
- 2) *Mutra*(urine): *prakruta*;
- 3) *Mala*(stool): *vibandha*;
- 4) *Jihva*(Tongue): *lipta*;
- 5) *Shabda*(auditory sensation): *prakruta*;
- 6) *Sparsha*(tactile sensation): *khara*;
- 7) *Druk*(visual acuity): *prakruta*;
- 8) *Aarkruti*(built): *krusha*.

Examination of skin:

There was multiple, dry, rough, uneven lesions all over the body. Koebner's phenomenon, Candle Grease sign, Auspitz sign, Scratch test are positive in the patient.

RESULTS

There was considerable reduction in symptoms like itching and peeling off of greyish skin over the scalp, abdomen and upper limbs. On the first follow-up, *jalaaukavacharana* was planned near both ankle joints. On the second follow-up, reduction in itching and peeling off of greyish skin was observed. Observation was carried out for 11 months and significant improvement was seen. Follow-up was done for 11 months. The patient was



advised *pathyahara*(specific diet) and to avoid non-vegetarian diet, junk food, fried food items and milk products.

Deepana pachana (Table 1 and Table 8)

(FIGURE 1)

Table 1 *Deepana* (appetizer) and *pachana* (digestive) for 2 days from 22-12-2017 to 23-12-2017

Sl.no	Medicine	Dose
1	<i>Agnitundi vati</i> (1 vati=125g)	2-2-2 (30 minutes before food)
2	<i>Chitrakadi vati</i> (1 vati=125g)	2-2-2 (20 minutes before food)
3	<i>Panchakola Phanta</i>	50ml-50ml-50ml (10 minutes before food)

Table 2 *Bahirparimarjana chikitsa* (external therapeutic procedures) for 2 days from 22-12-2017 to 23-12-2017

Sl.no	Treatment
1	<i>Sarvanga parisheka</i> with <i>Panchavalkala kwatha</i>
2	<i>Manjishatadi lepa</i> over <i>ubhaya janu sandhi</i>
3	777 oil application for all over the body



Fig 1 Day of Admission (22-12-2017)

*Agnitundi rasa*¹ contains *Shodhita Parada*(purified mercury), *Visha* (*Aconitum ferox*), *Shodhita Gandhaka* (purified sulphur), *Ajamoda* (*Apium graveolance*), *Phalatraya* i.e, *Harithaki* (*Terminalia chebula*), *Vibhithaki* (*Terminalia bellerica*), *Amalaki*(*Emblica officianalis*), *Swarjikshara*, *Yavakshara* (kshara of *Hordeum vulgare*), *Vahni* (*Plumbago zeylanica*), *Saindhava* (rock salt), *Jeeraka* (*Cuminum cyminum*), *Sauvarchala*(black salt), *Vidanga* (*Embelia ribes*), *Samudra lavana*(sea salt) *Tankana* (*Borax*), *Vishamushti* (*Strychnus nuxvomica*). This vati being *mardana*(trituration) with *jambheera rasa* cures *agnimandya* more effectively.



*Chitrakadi vati*² contains *Chitraka(Plumbago zeylanica)*, *Pippalimoola (Piper longum)*, *Yava kshara*, *Sarjikshara, Lavana varga*, *Shunti (Zingiber officinale)*, *Maricha (Piper nigrum)*, *Pippali (Piper longum)*, *Ajamoda (Apium graveolance)*, *Hingu (Ferula asafoetida)*, *Chavya (Piper chaba)*, *Nimbu swarasa* (lemon juice).

*Panchakola phanta*³ is one of the *panchavidha kashaya kalpana* which is prepared by adding 4 parts of water to 1 part of *panchakola churna* which is macerated well, filtered and used.

Being a *kleda Pradhana vyadhi*, there was *srava*(exudation), *kandu*(itching), *agnimandya*(decreased digestive fire) and *sama lakshanas*. Few drugs like *haritaki*, *haridra*, *saindhava*, *kshara* etc helps in removal of *kleda* by causing *drava shoshana*. *Kanduhara* action is carried out by drugs like *vidanga*. *Shunti*, *hingu*, *pippali*, *visha*, etc. bring about *agni deepana*. *Ama pachana* action is brought by drugs like *chitraka*, *vishamushti*, *ajamoda*, etc.

The overall effect of *deepana pachana* is that it makes the *agni* ready to accept the *Sneha* for proper *jeerna*.

Bahirparimarjana chikitsa (Table 2) (FIGURE 1)

Table 2 *Bahirparimarjana chikitsa* (external therapeutic procedures) for 2 days from 22-12-2017 to 23-12-2017

Sl.no	Treatment
1	<i>Sarvanga parisheka</i> with <i>Panchavalkala kwatha</i>
2	<i>Manjishtadi lepa</i> over <i>ubhaya janu sandhi</i>
3	777 oil application for all over the body

Sarvanga parisheka or *parisheka sweda* is a *sagni sweda* where hot *kwatha*, *taila*, *ghrita*, *dugdha*, *kanji*, *gomutra*, etc. liquids are poured over the body from a specific height for a specific duration of time. Here, in this case *panchavalkala kwatha* was used.

*Panchavalkala kwatha*⁴ is one of the *panchavidha kashaya kalpana* which is prepared by adding parts of water and heated till it gets reduced to 1/4th of the original quantity.

Parisheka with *panchavalkala kashaya* helps in reducing *kandu*(itching), *kleda*, *srava*(secretions)

*Manjishtadi lepa*⁵ consists of *madhuka*(*Glycyrrhiza glabra*), *manjishta*(*Rubia cordifolia*), *rakta chandana*(*Pterocarpus santalinus*), *shatadhauta ghrita*, *shali pishta*(rice flour). The *lepa* was applied due to severe pain and swelling in the *janu sandhis*.

Snehapana (Table 3 and Table 9)

Table 3 *Shodhananga Snehapana*(medicated ghee) in *arohana karma*(increasing dose) with *Panchatikta Ghrita* for 4 days.

Procedure	Dose	Treatment date
<i>Snehapana</i>	30ml	24-12-2017
	70ml	25-12-2017
	120ml	26-12-2017
	140ml	27-12-2017



Table 9 *Shodhananga Snehapana* (medicated ghee) in *arohana karma* (increasing dose) with *Panchatikta Ghrita* for 5 days.

Procedure	Dose	Treatment date
<i>Snehapana</i>	30ml	09-03-2018
	70ml	10-03-2018
	110ml	11-03-2018
	150ml	12-03-2018
	200ml	13-03-2018

Snehana normalises *vata*, brings about smoothness of the body, and relieves constipation⁶. It brings about *snigdhatva* (unctuousness), *vishyandata* (liquefaction), *mardavata*(softness) to the body⁷. *Sushruta* has given specific *kala* for *snehapana*⁸, which can be taken 15-30 minutes before sunrise because *dosha utklesha* takes place during this time.

Table 4 *Panchakarma* (five eliminative procedures).

Procedure	Medicine	Treatment date
<i>Sarvanga abhyanga, sarvanga nadi sweda</i>	<i>Nalpamaradi taila</i> for <i>abhyanga</i>	28-12-17 to 30-12-17
<i>Virechana</i>	<i>Trivrut lehya</i>	30-12-2017
Discharged on 31-12-2017		
<i>Samsarjana krama</i>	<i>Peyadi krama</i>	31-12-2017 to 6-1-18
Follow-up after 10 days		
<i>Jalaukavacharana</i> near <i>ubhaya gulpha sandhi</i>	-	11-1-2018

Swedana is a procedure which relieves stiffness, heaviness and coldness and produces sweating in the body¹⁰. After *samyak snehana*, *swedana* causes *dravatva of leena doshas* present in *suksma srotasas* which is then expelled out through *shodhana*¹¹. *Mrudu sweda* was advised as it is *kleda pradhana vyadhi*.

Virechana (Table 4) (FIGURE 2)

It is the second therapy in the sequence of *panchakarma* and is most widely used *shodhana karma* because of its simplicity and eliminates *doshas* with lesser stress

*Panchatikta ghrita*⁹ contains *Nimba* (*Azadiracta indica*), *Patola* (*Tricosantus diocia*), *vyaghri* (*Solanum xanthocarpum*), *Guduchi* (*Tinospora cordifolia*), *Vasa* (*Adatoda vasica*), *triphala* (*Terminalia chebula*, *Terminalia bellirica*, *Embllica officinalis*), *ghrita*. This *ghrita* has *tikta rasa, ushna veerya, katu vipaka, tridosha shamaka* mainly *pitta* and *kapha hara*. There was reduction in *kandu*(itching) and *kleda* at the end of *shodhananga snehapana*.

Swedana (Table 4)

when compared to *vamana*. *Virechana dravyas* have predominance of *prithvi* and *jala mahabhuta* which has natural tendency to move downwards and hence assist in inducing *virechana*¹². The probable mode





Fig 2 1st Follow-up (11-01-2018)

of action of laxatives is to induce mild, limited low grade inflammation in the small and large intestines to promote accumulation of water and electrolytes and stimulate intestinal motility¹³. The *dravyas* increases the bulk of the faeces which is said to be occurring due to *pruthvi mahabhuta* and few other *dravyas* maintain an increased fluid volume by osmosis which may be compared to action of *jala mahabhuta*. Based on the *satva, bala* of the subject, *virechana* was planned with *trivrut lehya*.

*Trivrut lehya*¹⁴ (Table 4)

It contains *trivrut kashaya*(decoction), *trivrut choorna*(powder), *sita*(sugar), *madhu*(honey), *trijataka*(*twak, ela, patra*). *Trivrut* is having *kashaya, madhura rasa, katu vipaka, kapha pitta shamaka*. It is *sukha virechaka* and *hrudya* in nature.

Table 5 Discharge medications

Hence, it produces *vegas* without much discomfort to the subject.

Jalaukavacharana (Table 4) (FIGURE 2)

Acharya Sushruta has included *jalauka* under the *anushastra*. *Raktamokshana* by *jalauka* is preferably done when there is involvement of *pitta*¹⁵. The saliva of leech contains histamine, acetylcholine like substances which causes local vasodilatation resulting in circulation of fresh blood making the tissue healthy. As a result, there will be new cellular division due to counter irritant effect on the lesion¹⁶.

*Nimbadi guggulu*²² (Table 5) (FIGURE 3)

It contains *Nimba twak* (*Azadirachta indica*), *Triphala* (*Terminalia chebula, Terminalia bellerica, Embelica officianalis*), *Vasa* (*Adatoda vasica*), *Katu Patola* (*Tricosanthes dioca*), *Guggulu* (*Commiphora mukul*). All ingredients in this formulation have *kushtaghna* property. *Nimba, Patola, Vasa* have *tikta rasa*. It is described as *pathya rasa* for *kushta*. *Charaka* included *Nimba, Patola* in *kandughna gana*(anti-pruritic drugs). *Harithaki, Guggulu* has *shothahara* property. *Triphala*(*Harithaki, vibhitaki* and *amalaki*) possess anti-oxidant property. These properties help to reduce signs and symptoms in *ekakushta*.

777(triple seven) Oil²³ (Table 5 and Table 7) (FIGURE 3)



Medicine	Dose	Anupana	Duration
<i>Nimbadi guggulu</i> (1 guggulu=250g)	1-0-1 (5minutes after food)	<i>Koshna jala</i>	10 days
<i>Gandhaka rasayana</i> (1tab=250g)	1-1-1 (10 minutes after food)	<i>Koshna jala</i>	10 days
<i>Arogyavardhini vati</i> (1 vati=125g)	1-0-1 (15 minutes after food)	<i>Koshna jala</i>	10 days
<i>Manibhadra guda</i>	0-0-10gm (30 minutes after food)	<i>Koshna jala</i>	10 days
<i>Patola katurohinyadi Kashaya</i>	30ml-30ml-30ml (15 minutes before food)	With equal quantity of <i>koshna jala</i>	10 days
777 oil	For external application		10 days



Fig 3 Next follow-up (25-01-2018)

It contains *Shweta kutaja*(*Wrightia tinctoria*) which has *kushtaghna* (alleviates skin disease) and *kandughna* (alleviates itching) property. After using this there will be increase in the bio-availability of the active ingredients which further balances the micro and macro level of activities. Ideal hydro-lipo quotient reduces the dryness of the skin, associated itching, and delays cell death.

***Manibhadra guda*²⁴ (Table 5) (FIGURE 4)**

It contains *Vidanga sara* (*Embelia ribes*), *Amalaki* (*Emblica officianalis*), *Haritaki* (*Terminalia chebula*), *Trivrut* (*Operculina turpetum*) and *Guda* (Jaggery). It is indicated in *kandu* and *kushta*. *Vidanga* is one of the best *krimihara dravya*. *Haritaki*, *Vibhitaki* and *Amalaki* possess anti - oxidant, mild laxative properties. *Trivrut* being *sukha virechaka dravya* help in elimination of vitiated *doshas*.

***Patola katurohinyadi kashaya*²⁵ (Table 5) (FIGURE 4)**



Fig 4 Next follow-up (08-02-2018)
It contains *patola* (*Trichosanthes dioica*), *katurohini* (*Picrorhiza kurroa*), *chandana* (*Santalum album*), *madhu srava* (*Marsdenia tenacissima*), *guduchi* (*Tinospora cordifolia*), *patha* (*Cissampelos pariera*). Most of the drugs are having *tikta rasa* which acts against *kushta* by removing the *kleda* in the body.

Table 6 Follow-up medications.

Medicine	Dose	Anupana	Duration
Follow-up after 10 days			
<i>Gandhaka rasayana</i> (1tab=250g)	1-1-1 (10 minutes after food)	<i>Koshna jala</i>	14 days
<i>Guggulu tiktaka ghrita</i>	5g-0-5g (10 minutes before food)	<i>Koshna jala</i>	14 days
<i>Chitrakasava</i>	30ml-30ml-30ml (15 minutes before food)	<i>Koshna jala</i>	14 days
<i>Ashwagandha churna</i>	6g at 6a.m-6g at 6p.m	<i>Ksheera</i>	14 days
<i>Vara churna</i>	0-0-15g (30 minutes after food)	<i>Koshna jala</i>	14 days
<i>Eladi taila</i>	For external application		14 days
Follow-up after 14 days			
<i>Guggulu tiktaka ghrita</i>	5g-0-5g (10 minutes before food)	<i>Koshna jala</i>	15 days
<i>Maha manjishtadi</i>	30ml-30ml-30ml (15 minutes before food)	<i>Koshna jala</i>	15 days
<i>Ashwagandha churna</i>	6g at 6a.m-6g at 6p.m	<i>Ksheera</i>	15 days
<i>Eladi taila</i>	For external application		15 days
Eladi soap	For bathing		15 days
Cap. Puritin	1-0-1 (10 minutes after food)	<i>Koshna jala</i>	15 days

Table 7 *Rasayana chikitsa*(Rejuvenative medications).

Sl.no.	Medicine	Dose and anupana
1	<i>Amalaka rasayana</i>	5 g at 7 a.m. with milk
2	<i>Gandhaka rasayana</i>	2-0-2 (15 minutes after food)
3	777 oil	External application

*Gandhaka rasayana*²⁶ (Table 6 and Table 7) (FIGURE 5)



Fig 5 Next follow-up (19-04-2018)

It contains purified *Gandhaka*(sulphur), *Twak*(*Cinnamomum zeylanicum*), *Ela*(*Elatteria cardamomum*), *Patra*(*Cinnamomum tamala*), *Nagakesara*(*Mesua ferrea*), *Guduchi*(*Tinospora cordifolia*), *Harithaki*(*Terminalia chebula*), *Amalaki*(*Emblica officianalis*), *Vibhithaki*(*Terminalia bellerica*), *Shunti*(*Zingiber officianale*), *Bhringaraja*(*Eclipta alba*). It is having anti-bacterial, anti-viral and anti-microbial properties. It is useful in the treatment of *kandu*(pruritus), *kushta*(group of skin manifestations), *visha*(toxic conditions),

Table 10 *Panchakarma*(five eliminative procedures).

Procedure	Medicine/Diet	Treatment date
<i>Sarvanga abhyanga</i> , <i>sarvanga nadi sweda</i>	<i>Nalpamaradi taila</i> for <i>abhyanga</i>	14-03-2018 and 15-03-2018

*rakta vaishamy*a(vitiation of blood/disorders of blood). It is *veeryakara*(improves immunity, fertility and potency), *pushtikara*(improves nourishment), *vahnikara*(improves digestion strength).

*Amalaka rasayana*²⁷ (Table 7 and Table 11) (FIGURE 5)

It contains *amalaki*, *vibhitaki* and *haritaki*. These ingredients are covered with wet bark of palasha over which a layer of mud of 1 anguli thickness is applied and *aatapa shushka*(dried under sunlight) is done. The seeds are separated from the *phala majja*(fruit pulp). Thousand *pala* (48 kg) of these ingredients is mixed with thousand *pala* of *dadhi*(curds), *ghrita*(ghee), *madhu*(honey), *palala*(*tila kalka*), *tila taila* and *sharkara*(sugar) thus making total quantity of 2000 *pala* (96 kg). Time for intake of rasayana is morning empty stomach following which *samsarjana krama* (specific diet) should be followed. It helps in attaining *yuvatva*(youthfulness/vitality), *bala* for *sharira*(physical body), *buddhi*(intellect) and *indriyas*(sense organs).

Vamana (Table 10) (FIGURE 6)

It is the procedure in which *apakva pitta*



<i>Kaphotkleshakara aahara</i>	Vada with curds, milk made sweet products, curd rice, sugarcane juice	14-03-2018
<i>Vamana</i>	Madanaphala patra churna(20g) + saidhava lavana(5g) + Madhu (Q.S)	15-03-2018
Discharged on 16-03-2018		
<i>Samsarjana karma</i>	<i>Peyadi krama</i>	16-03-2018 to 22-03-2018
Follow-up after 15 days		

Table 11 *Rasayana chikitsa*(Rejuvenative medications).

Sl.no.	Medicine	Dose and <i>anupana</i>
1	<i>Amalaka rasayana</i>	5 g at 7 a.m. with milk
2	<i>Gandhaka rasayana</i>	2-0-2 (15 minutes after food)
3	777 oil	External application

and *kapha* are expelled out forcibly through mouth¹⁷. In *kushta chardana* is indicated in every paksha (once in 15 days)¹⁸. Due to presence of *bahudoshavastha*(excessively large quantity of doshas) in *kushta* along with *krushata*(emaciation), stoka stoka dosha nirharana(frequent removal of doshas in small quantity) taking care about the subject's *bala*(strength). The act of vomiting is controlled by the Chemoreceptor Trigger Zone (CTZ) which is an area of the medulla oblongata. Since there is no blood-brain barrier to CTZ, emetic drug reaches CTZ and acts on chemoreceptors thus initiating vomiting reflex¹⁹.

Vamanoushadhi (Table 10)

*Madanaphala patra churna*²⁰ (20g) along with *saindhava lavana*(5g) and *madhu*²¹ (sufficient quantity) was used as a *vamaka aushadhi* (emetic medicine).

The dose of *madanaphala patra churna* was decided based on the pilot study

conducted in 20 subjects irrespective of the disease.

CONCLUSION

Ekakushta is a *vata-kaphaja dushti* as per *Acharya Charaka* and *kaphaja* according to *Acharya Sushruta*. Being *kleda pradhana vyadhi*, in this case after properly assessing the *satva* and *bala* of the subject, *virechana* was planned after *shodhananga snehapana*. Three months later, *vamana* was planned because of *madhyama bala* and *pravara satva* of the subject. Hence *panchakarma* need to be planned based on the *avastha* of the subject and after proper examination ensuring that the subject is fit for the particular procedure. Thus, *panchakarma* especially *vamana* and *virechana* plays a vital role in removing the vitiated *doshas* from its root level in turn preventing its recurrence.



Fig 6 Next follow-up (24-05-2018)

REFERENCES

1. Shri Govind Das; Bhaisajya Ratnavali; Kaviraja Ambikadatta Shastri; Chaukhamba Prakashan; Varanasi; 19th edition; 2008; 344
2. Shri Govind Das; Bhaisajya Ratnavali; Kaviraja Ambikadatta

Shastri; Chaukhamba Prakashan; Varanasi; 19th edition; 2008; 242

3. Bhavamishra; Bhavaprakasha

Nighantu; K.C. Chuneekar and .G.S. Pandey; Chaukhamba Orientalia; Varanasi Vol. 1; 9th edition; 1993; 24

4. Kaviraj Sri Govind Das Sen. Bhaisajya Ratnavali; Siddhinandan Mishra; Chakamba Surabharati Prakashan; Varanasi; 57/15; 917

5. Acharya JT, Susruta Samhita of Susruta Nibandha Sangraha Commentary of Sri Dalhana Acharya and Nyaya Chandrikapanjika of Sri Gayadasa Acharya. Chikitsa sthana; Bhagna Chikitsa adhyaya: 3/7. Varanasi. Chaukhamba Sanskrit Sansthan; 2015; 415

6. Acharya YT. Charaka Samhita with Ayurveda Deepika commentary of Chakrapanidatta. Siddhi sthana. Kalpana Siddhi adhyaya. chapter 1, 7. Varanasi: Chaukhamba prakashana. 2013. p. 678

7. Acharya YT. Charaka Samhita with Ayurveda Deepika commentary of Chakrapanidatta. Sutra sthana. Langhanabrumhaneeya adhyaya. chapter 22, 11. Varanasi: Chaukhamba prakashana. 2013. p. 120

8. Acharya JT, Susruta Samhita of Susruta Nibandha Sangraha Commentary of Sri Dalhana Acharya and Nyaya Chandrikapanjika of Sri Gayadasa Acharya. Chikitsa sthana; Snehopayougika



chikitsa adhyaya: 31/14. Varanasi. Chaukamba Sanskrit Sansthan;2015;510

9. Shri Govind Das; Bhaisajya Ratnavali; Kaviraja Ambikadatta Shastri; Chaukhambha Prakashan; Varanasi; 19th edition; 2008; 906

10. Acharya YT. Charaka Samhita with Ayurveda Deepika commentary of Chakrapanidatta. sutra sthana. Langhanabrumhaneeya adhyaya. chapter 22, 11. Varanasi: Chaukhambha prakashana. 2013. p. 120

11. Acharya YT. Charaka Samhita with Ayurveda Deepika commentary of Chakrapanidatta. siddhi sthana. Kalpana Siddhi adhyaya. chapter 1, 7. Varanasi: Chaukhambha prakashana. 2013. p. 678

12. Acharya YT. Charaka Samhita with Ayurveda Deepika commentary of Chakrapanidatta. kalpa sthana. Madanakalpa adhyaya. chapter 1, 5. Varanasi: Chaukhambha prakashana. 2013. p. 651

13. Lohith B A.A text book on panchakarma. 1st edition. Varanasi: Chaukhambha Orientalia; 2016: 261

14. Hari sadasiva sastri paradakara editor. Sarvangasundara commentary of Arunadatta and Ayurvedarasayana commentary of Hemadri on Astangahrdaya of Vagbhata. Reprint

edition. Kalpasthana; Virechana kalpa adhyaya; 2/9. Varanasi: Chaukhambha Sanskrit Sansthan; 2016: 742

15. Acharya JT, Susruta Samhita of Susruta Nibandha Sangraha Commentary of Sri Dalhana Acharya and Nyaya Chandrikapanjika of Sri Gayadasa Acharya. Sutra sthana; Jalaukavacharaneeya adhyaya: 13/4. Varanasi. Chaukamba Sanskrit Sansthan; 2015; 55

16. C Patil Vasant. Principles and Practice of Panchakarma. Reprint. Varanasi: Chaukhambha Publications; 2016: 581

17. Durgadadatta Shastry, editor. Tattvadeepika hindi commentary of Durgadatta Shastry on Sharangadhara Samhita, prathamakhanda, Chaturtho adhyaya, 4/7. Varanasi; Chaukhambha Vidhyabhavan; reprint 2002: 36

18. Acharya JT, Susruta Samhita of Susruta Nibandha Sangraha Commentary of Sri Dalhana Acharya and Nyaya Chandrikapanjika of Sri Gayadasa Acharya. Chikitsa sthana; Kushtachikitsita adhyaya: 9/43. Varanasi. Chaukamba Sanskrit Sansthan; 2015; 446

19. Lohith B A.A text book on panchakarma. 1st edition. Varanasi: Chaukhambha Orientalia; 2016: 229

20. Acharya YT. Charaka Samhita with Ayurveda Deepika commentary of



Chakrapanidatta.vimana
sthana.Rogabhishagjiteeyaadhyaya.chapter
8,135.Varanasi:Chaukhamba
prakashana.2013.p.282-3
21.Acharya YT.Charaka Samhita with
Ayurveda Deepika commentery of
Chakrapanidatta.kalpa
sthana.madanakalpaadhyaya.chapter
1,15.Varanasi:Chaukhamba
prakashana.2013.p.654
22.Acharya
Basavaraj;Basavarajeeyam;Jnanendra
Pandeya;Choukhambha Krishnadas
Academy;Varanasi;1st edition;2010;566
23.[https://www.google.com/amp/s/ayurme
dinfo.com/2016/08/25/777-oil-benefits-
use-ingredients-side-effects/amp/date:15-
12-2018](https://www.google.com/amp/s/ayurmedinfo.com/2016/08/25/777-oil-benefits-use-ingredients-side-effects/amp/date:15-12-2018)
24.Hari sadasiva sastri paradakara
editor.Sarvangasundara commentary of
Arunadatta and Ayurvedarasayana
commentary of Hemadri on Astangahrdaya
of Vagbhata.Reprint
edition.Chikitsasthana; kushtachikitsita
adhyaya;19/31,32.Varanasi:Chaukhamba
Sanskrit Sansthan;2016:713
25.Hari sadasiva sastri paradakara
editor.Sarvangasundara commentary of
Arunadatta and Ayurvedarasayana
commentary of Hemadri on Astangahrdaya
of Vagbhata.Reprint edition.Sutrasthana;
Shodhanadiganasangraha

adhyaya;15/15.Varanasi:Chaukhamba
Sanskrit Sansthan;2016:215
26.Yoga ratnakara; Lakshmipati Sastri and
Brahmasankar Sastri; Chaukhambha
Sanskrit sansthan; Varanasi;7th edition;
1999;501
27.Hari sadasiva sastri paradakara
editor.Sarvangasundara commentary of
Arunadatta and Ayurvedarasayana
commentary of Hemadri on Astangahrdaya
of Vagbhata.Reprint
edition.Uttaratantra;Rasayanavidhi
adhyaya;39/148.Varanasi:Chaukhamba
Sanskrit Sansthan;2016:215.