



ROLE OF PANCHAKARMA IN TREATMENT OF POISONING WITH REFERENCE TO CHATURVIMSHATI UPKRAMA: A REVIEW

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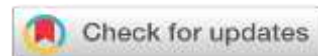
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ABSTRACT

Agadatantra is the sixth branch of *Ashtang* Ayurveda which deals with animate and inanimate poisoning. A general principle of treatment of poisoning is explained in Ayurvedic Samhitas like *Charaka*, *Sushruta*, and *Vagbhata*. For the management of poisoning, *Charak* has explained *Chaturvimshati Upakrama* (24-treatment procedure). In these procedures, *Rakta mokshana*, *Vamana*, and *Virechana*, are *Panchakarma* procedures and *Agni karma*, *Parisheka*, and *pradeha*, *Avagaha*, *Nasya*, *Lepa*, *Pratisarna*, and *Dhooma* are *Anukarma*. These treatment modalities are useful in the management of all types of poisoning. Poison has been polluting human and non-human forms since ancient times. These *panchkarma* procedures are also useful in the treatment of many diseases and have been used since ancient times. Together these Ayurvedic *Panchkarma* procedures mentioned in our ancient *samhitas* are useful in the elimination of all types of poisons from the body in the present era. Different *Panchkarma* procedures can be used according to *vish vega*, signs and symptoms, condition of the patient, and *visha adhishtana* where the poison is deposited. With the help of different *vaman* and *virechan* yogas poisons can be removed from the body. If toxins entered the blood, then *Raktamokshana* is an important procedure to be used. *Agni karma*, *Parisheka*, *pradeha*, *Avagaha*, *Nasya*, *Lepa*, *Pratisarna*, and *Dhooma* are also important procedures for the removal of toxins from the body. The objective of the present study is to elaborate on the role of *panchkarma* procedures that are mentioned in *Chaturvimshati upkrama* in the management of poisoning, the role of *Panchakarma* in the removal of poisons from the body, and to study the application of ancient treatment proce-

dures in the present era. *Panchkarma* procedures play a very important role in the elimination of toxins from the body and in the treatment of all types of poisoning.

Keywords: *Panchkarma*, poison, *Chaturvimshati upkrama*, *Charak Samhita*.

INTRODUCTION

Agadatantra is one of the eight branches of Ayurveda, in which animate and inanimate poisons and their treatment is mentioned. In *Agadatantra* concepts like *Dooshi visha* (cumulative poisoning) and *Gara visha*^[1] (Adverse drug reaction) and *Chaturvimshati Upkrama* (24 treatment modalities) are explained by *Acharya Charak*. The *Chaturvimshati upkramas* are *Mantra* (Chanting hymns), *Arishta bandhana* (Touriquet application), *Uthkarthana* (Incision), *Nishpeedana* (Squeezing), *Chushana* (sucking), *Agni* (Cauterization), *Parisheka* (Sprinkling), *Avagaha* (Immersion bath), *Rakthamoshana* (Bloodletting), *Vamana* (Emesis), *Virechana* (Purgation), *Upadhana* (Applying for medicine over incised scalp), *Hridayavarana* (protection of hridaya), *Anjana* (Collyrium), *Nasya* (Nasal installation), *Dhoopa* (Fumigation), *Leha* (linctus), *Aushadha* (medicine), *Prashamana* (pacifying measure), *Prathisarana* (rubbing), *Prathivisha* (antidote), *Sanjastapanam* (regaining consciousness), *Lepa* (ointments), *Mrthasanjivani* (revival)^[2]. In these procedures, *Agni karma*, *Parisheka*, *pradeha*, *Avagaha*, *Rakta mokshana*, *Vamana*, *Virechana*, *Nasya*, *Lepa*, *Pratisarna*, and *Dhooma* are *Panchakarma* procedures. These treatment modalities are useful in the management of all types of poisoning. Poison has been polluting human and non-human forms since ancient times. These *panchkarma* procedures are also useful in the treatment of many diseases and have been used since ancient times. Together these Ayurvedic *Panchkarma* procedures mentioned in our ancient *samhitas* are useful in the elimination of all types of poisons from the body in the present era also. The present study focused on *Panchkarma* mentioned in *Chaturvimshati Upkrama* and its application in the removal of toxins from the body in the recent era.

Aim and Objectives

1. To elaborate on the role of *panchkarma* procedures that are mentioned in *Chaturvimshati upkrama* in the management of poisoning.
2. To study the role of *Panchakarma* in the removal of poisons from the body.
3. To study the application of ancient treatment procedures in the present era.

Material and Method

1. Data related to *Chaturvimshati Upkrama* was collected from *Charak Samhita*.
2. Literature related to *Panchkarma* and its application in various poisoning is collected from *Brihatrayi*.
3. *Vamanadi Panchkarma chikitsa* is *shodhan chikitsa* that should be immediately used in case of poisoning and is included in *Chaturvimshati Upkrama*.

Review of literature

Incidence of poisoning is very common in the present era. Due to lifestyle changes, industrialization and modernization we come across various toxins which are harmful to human health. In *Agadatantra* different types of *visha* (poisons) are mentioned like *Sthawar visha* (plant origin) and *Jangham visha* (animal origin). *Gara visha* and *Dooshi visha* and their line of treatment are also mentioned in *Charak*, *Sushrut*, and *Vagbhat samhita*. *Acharya Charaka* has mentioned *Chaturvimshati upkrama* (twenty-four modalities) to remove all types of poisons from the body. Out of 24 *Upkrama*, *Raktamokshan*, *Vamana*, *Virechana*, and *Nasya* is included as *Panchkarma* and some *karma* such as *Agnikarma*, *Parishek*, *Anjana*, *Lepa*, *Dhoom*, *Leha*, *Pratisarna* are *Anukarma*.

1. *Mantra* (hymn): *Mantra chikitsa* is very important in animate poisoning special in snake and scorpion bites. *Mantra chikitsa* should be practiced by an individual who abstains from women, meat,

and wine. A person should take little food, maintain the hygiene of the body, and should sleep on a mattress made with *kusha grass*^[3]. With the help of *mantra* and *arishtabandhana*, there is no spread of poison in the body and the patient's life can be saved.

2. *Arishta bandhana* (Tourniquet application): *Arishtabandhana* is the application of a tourniquet above the site of a snake or scorpion bite when there is no spread of poison in the whole body^[4]. According to *Acharya Sushrut* application of the *arishta bandhana* should be done four fingers above the site of the bite and with the help of cloth or bark of a tree or any other soft material. *Venikabandhanam* is done with or without a *mantra* to stop the spread of poison^[5]. *Arishtabandhan* should be tied with the help of soft thread with *mantra* enchanting and as the flow of water obstructed by the dam, spread of poison obstructed by *arishtabandhan*.
3. *Uthkarthana* (Incision): If the bite is not on the *marma* and joints then the incision is taken at the site of the bite, or some part of the skin is cut to avoid the spread of poison^[4].
4. *Nishpeedana* (squeezing): *Nishpeedana* is done when the incision is not possible. At the site of the bite, squeezing is done with the application of pressure from all sides so that poison is removed from the body and further spread is prevented. It is not advisable at vital points and joints. This method helps remove poison just like destroying seeds before sprouting^[4].
5. *Chushana* (sucking): In this physician suck poison with the help of his lip with a mouth filled with dry sand, ash, or dried powder of cow dung or *agada* (medicine). Sucking is done through an incision made below the *arishtabandhan* on the site of the bite. This method is specially adopted for fleshy parts^[6].
6. *Agnikarma* (cauterization): It is *Anukarma*, and it should not be done in *pitta pradhan visha*. In the case of snake bite, it is contraindicated in *Mandali sarp* and indicated in all snakes. The site of the bite is burnt with a heated rod of gold, iron, or wooden stick can be used^[7].
7. *Parishek* (Sprinkling): In a snake bite affected part or organ is sprinkled with water medicated with *raktchandan* and *usheer*^[8]. Contact or local poisons are washed with cold, lukewarm, or medicated water.
8. *Avagahana* (Immersion bath): *Avagahana* means immersion of body parts or the whole body in a medicated decoction.
9. *Raktamokshan* (Bloodletting): When poison spreads absorb in the body and mix with blood then *Raktamokshan* (bloodletting) should be done immediately. Bloodletting absorbs poison removed from the body with blood^[6]. If bloodletting (*siravedh*) is not done immediately then poison spreads all over the body and leads to death. *Raktamokshan* (*Siravedh*) is contraindicated in children, pregnancy, and old age person^[9]. If bloodletting is not done properly then pressure should be applied in that particular area. In *Charak samhita Acharya Charak* has mentioned the *gharshan* process with *churna* which help in easy bloodletting such as *sunthi*, *marich*, *pippali*, turmeric, *panch lavana*, *gorochan*, *kantakari*. *Siravedh* (venesection) should be done from peripheral veins around the site of the bite and if poison is spread all over the body, then venesection should do at the extremities and forehead. It is very effective in the removal of toxins from the body and hence it is the topmost treatment for all types of poisoning^[10].
10. *Vamana* (Emesis): When poison spread all over the body and when it is in the stomach and symptoms like nausea are present then emesis is indicated. Emesis is indicated in the first *vega* (phase) of *Sthavar visha* when the poison is present in the stomach^[11]. *Vamana* (Emesis) is also indicated in *Gara visha* and *Dushi Visha*^{[12][13]}. In *Darveekar sarpadansha* emesis is indicated in the 2nd, 4th, 5th, and 6th *vega* (phase). In *Mandali sarpadansha* emesis is indicated in the 3rd *vega* (phase). In *Rajimana sarpadansha* emesis is indicated in the 2nd, 4th, and 5th *vega* (phase)^[14].

11. *Virechana* (Purgation): *Virechana* (Emesis) is indicated in the 2nd *vega* (phase) of *sthawar visha* (inanimate poison)^[11]. *Virechana* is indicated in *Pittavishatur* with symptoms like *daah* (burning sensation), excessive thirst, *vedana* (pain), *adhman* (distension of abdomen), retention of urine, stool, and flatulus^[15]. In *dooshi visha Virechan* (purgation) is indicated. In *Mandali sarpadansha* purgation is indicated in the 3rd, 4th, and 5th *vish vega* (phase)^[14]. *Virechana* is indicated in a *pittapradhan* person, bitten by a snake of *pitta* predominant features, having a bite below the umbilicus, and if *pitta* is localized in *pakwashaya*^[14].
12. *Upadhana*: The path of *kapha* is vitiated by poisoning and causes obstruction in *strotas* (channels). Due to *strotorodh* *vata* getting obstructed and the patient breath like he is going to die soon. In this stage incision should be made on the scalp of the patient resembling a crow's leg and a paste of *charmaksha* (*Picrorhiza kuruo*) or meat of goat, cow, buffalo, or cock with blood in one *bilva* quantity should be applied on the incised area. After this, nasal medication with a fine powder of *katabhi* (*Jyotishmati*), *katuka* (*marich*), and *Kayaphala* is given^[16].
13. *Hridayavarana* (protection of heart): Due to *Tikshna* (sharp) *guna* of poison, it affects the function of the heart. Therefore, the protection of the heart is very important. The properties of *ghruta* are exactly opposite to poison. The administration of *ghee* and *madhu* helps in the further spread of poison and protects the heart, also the administration of *Ghruta* with *agad* protects the heart from poison^[17]. Poison deranges *Tridoshas* (*vata*, *pitta*, *kapha*), including their *ashayas* (reservoir). From the heart, it is spread all over the body hence protection of the heart should be the prior duty of the physician. It is protected by consuming *Madhu* (Honey), *Ghee*, Milk, *Majja*, *Gairik*, *Gomaya rasa*, *Ikshu rasa*, *kakand* juice (*Diospyros malabarica*) juice, Blood of goat and other animal, ash mixed with water and oil mixed with water^[18].
14. *Anjana* (Collyrium): Due to poisoning when there is an obstruction in the normal function of the eye then *Anjana* is indicated with *Devdaru*, *sunthi*, *Marich*, *pippali*, *leaf of Kaner*, *Karanj*, *Neem*, and *Tulsi*^[19]. It is indicated in the 5th *vega* (phase) of *sthawar visha* (inanimate poison)^[20]. *Anjana* is indicated in the management of poisoning when the eyes are oedematous, the patient feels sleepy, and discolouration of the eyes, excessive lacrimation, and blurred vision^[21]. In *Darveekar sarpadansha* collyrium is indicated in the 7th *vega* (phase)^[14]. In *Rajimana sarpadansha Anjana* is indicated in the 6th *vega* (phase)^[14].
15. *Nasya* (Nasal medication): *Nasya* is indicated when there is an obstruction in the normal function of the nose, eyes, throat, or tongue. With the help of powder form of *Brihat kantakari*, *Beejpur*, *Jyotishmati*^[19].
16. *Dhuma* (Medicated fumigation): *Tagar*, *Kushtha*, Head of the snake, and *Shirishpushpa* is mixed with *ghrut* and *Dhumagad* is prepared. It is used for medicated fumigation to alleviate all types of poison and reduce swelling due to poison. Medicated fumigation of *Laksha*, *Khas*, *Tejpatra*, *Guggul*, *Bhallataka*, *Arjunpushpa*, *Sarjarasa*, and *Shweta aparajita* in the same quantity helps in the destruction of snakes, rats, insects, and worms in cloths^[22].
17. *Leha* (Linctus): Dryness of the throat and mouth is common in poisoning. For this *Lehya* is prepared with ghee and honey or can be given with medicines. *Leha* prevents the adverse effect of the poison on the body.
18. *Aushadha* (Medicines): All *Agada* mentioned in *Samhitas* are medicines. These *aushadhi* has taken internally to reduce complications of poison. For example, *Mrutsanjivani Agad*, *Mahagandhahasti Agad*, *ksharagad*, etc.
19. *Prashamana* (Suppressive drugs and procedure): In *Raktamokshana* (Bloodletting) *Kshiri* plant-like vat is used in the form of *kalka* to stop excess bleeding^[23]. Complications like *Mada*, *Murcha*, *Vishada*, and *Hriddrava* are treated by cold procedures like blowing hair with the help of a fan until

the patient doesn't show straightening of body hair^[24]. *Hinga* and *pippali churna* is given with honey and sugar or *kapithaswaras* and *lavana* is given with honey and sugar to stop complications like *jwar*, *hikka*, *shwas*, *kasa*, etc.^[25].

20. *Pratisarna* (Rubbing of medicated powder): If proper blood is not coming through bloodletting, rubbing of fine powders of *Sunthi*, *Maricha*, *Pippali*, *Grahadhuma*, *Haridra*, *Panchlavan* and *Brihatkantakari* is done^[26].

21. *Prativisha* (Antidotes): *Acharya Charaka* mentions that in the 7th *vega* (phase) of *visha* if inanimate poison occurred then the person should be bitten by venomous animals. If there is animate poisoning, then the person should treat with *sthawar visha*^[27].

22. *Sadnyasthapana* (Resuscitation): In the sixth *vega* of poison, *Sadnyaathapan* medicine that is *Gopita*, *Haridra*, *Manjishtha*, *Maricha*, and *Pippali* in the same quantity given with water^[28]. *Nasya* with *Tikshna dravya*, *siravedha*, and *Upadhana* are also part of resuscitation treatment.

23. *Lepa* (Pastes): *Lepa* is effective in *keeta visha* (insect bite), *Luta visha* (Spider bite), and *Vrischikdamsha* (Scorpion bite). *Padmak agad*, *Champk agad*, and *panchshirish agad* are some formulations which use as a local application in the treatment of insect bites. *Gandhahastinamagad* is used in the form of *lepa* (local application) to destroy all types of poison. It is used in insect bites, any type of injury, and many disease conditions^[29].

24. *Mritasanjivana agad*: *Sprikka*, *Plava*, *Sthouneya*, *Gorochan*, *Tagar*, etc. are taken in the same quantity in *pushya nakshatra* and small pill prepared. *Mritasanjivanaagad* is used in all types of poisoning in the form of *Nasya*, *Lepa*, *Dharana*, *Dhumagrahan*, etc.^[30].

• *Vaman Chikitsa* (Emesis): *Acharya charaka* mention *Vamanchikitsa* in *vishprabhav*, in case of an increase in salivation emesis induced^[31]. 180. *Vamanchikitsa* (emesis) is indicated in *Gara visha*, *Tamra churna* mixed with *Madhu* (honey) to induce emesis^[12]. Emesis is indicated in the first

vega of *sthawar visha* when the poison is present in the stomach. In *Darveekar sarpadansha* emesis is indicated in the 2nd, 4th, 5th, and 6th *vega* (phase). In *Mandali sarpadansha* emesis is indicated in the 3rd *vega* (phase). In *Rajimana sarpadansha* emesis is indicated in the 2nd, 4th, and 5th *vega* (phase)^[14]. *Vaman* is indicated in *mushak damsha* (Rat poisoning)^[32]. *Vaman* (emesis) and *Virechan* (purgation) are indicated in *Dushi visha*^[33]. In all types of *Keeta visha* (Insect bite) and *Luta visha* (spider bite), emesis is indicated^[34]. In rat poisoning, vomiting is induced with *Vacha*, *Madanphal*, *Jeemutak*, and *Gomutra* mixed with curd^[35]. Emesis is indicated in all types of *Vrischika Damsa chikitsa* (scorpion bite)^[36].

• *Virechan Chikitsa* (Purgation): *Virechan* is indicated in the second *vega* of *Sthawar visha* (inanimate poison)^[11]. In *Darvikara sarpadamsha* *Virechan* is indicated in the 5th and 6th stages^[14]. In *Mandali sarpadansha* purgation is indicated in the 3rd, 4th, and 5th *vish veg* (phase)^[14]. In *Rajimana* Purgation is indicated in the 3rd, 4th, and 5th *vega* (phase)^[14]. In *Mushikdamsha* (Rat bite) *Virechan* is administered with *Nishoth*, *Danti*, and *Triphala* paste^[37]. In *Alaska Visha* (Dog bite), purgatives given with *Arkakshir*, and *Dhatura* with *Shvet punarnava* are also used for *virechan*^[38]. *virechan* is indicated in all types of *Keeta Visha* (Insect bite) and *Luta Visha* (spider bite), *Triphala*, *Nishoth*, and the root of the *Neel* plant is used in *Virechan karma*^[39]. *Virechan* is indicated in all types of *Vrischika Damsa chikitsa* (scorpion bite)^[40].

• *Nasya Chikitsa* (Nasal medication): *Nasya Chikitsa* is indicated in the 5th *vega* (phase) of *sthawar visha*^[41]. *Nasya* is indicated in the 3rd and 7th *vega* (stage) of *Darvikara Sapadamshachikitsa*. In *Mandali Nasya* is indicated in the 7th *vega* (stage). In *Rajimana Nasya* is indicated in the 3rd and 7th *vega* (phase)^[14]. In the case of *Mushik visha damsha* (Rat bite), *Nasya* should administered with powder of bark or fruit powder of *Shirish*, and *Ruksha Nasya* is given^[42]. *Nasyachikitsa* is indicated in all types of *Keeta* and *Luta visha*,

Padmak agad Champak agad uses in *Nasya chikitsa*^[43].

- *Raktamokshana* (Bloodletting): *Raktamokshan* is indicated in the 1st *vega* (phase) of *Darvikara*, *Mandali*, and *Rajimana sarpadamsha*^[14]. In *Mushikdamsha Raktamokshan* is done for the removal of poison from the body^[44]. Venesection should be done in all types of *Vrischikdamsha* (scorpion bite)^[36]. *Raktamokshan* is indicated in types of *Luta visha* (spider bite)^[45].
- *Basti Chikitsa*: *Acharya Charaka* has not described *Basti chikitsa* in *Chaturvimshati Upkrama*.

DISCUSSION

In the present era cases of animate and inanimate poisoning are very common. Due to the enhancement of technology and industrialization environment gets polluted and it is very harmful to human beings. Toxic substances enter in body and interfere with the organ and systems of the body and can cause death. In *Charak Samhita Chaturvimshati Upkrama* is mentioned to remove poison from the body. In these 24 modalities, *Panchkarma chikitsa* is also included. *Panchkarma chikitsa* helps in the removal of poison from the body. *Vaman* (emesis) is indicated when the ingested poison is unabsorbed and it is in the stomach. *Vaman* is done with strong emetics and helps in removing the unabsorbed poison. *Virechan* (purgation) is carried out when the poison is in *pakwasaya*. *Virechan dravya* is given for the expulsion of toxic substances through the anal route. *Nasya* (Nasal medication) is indicated when the poison is located in the head and there is loss of consciousness. *Nasya* is given in the form of powder and liquid. *Tikshna nasya* is given to the unconscious patient to regain conscious of the patient and it cures many diseases of the head. *Raktamokshan* (Bloodletting) eliminates poison from the blood it is a very important procedure and should be administered immediately because blood is major media that spread poison rapidly in the body. The basic principle of treatment of poisoning is to restrict the entry of poison into the body before its absorption in the body, and if poison is absorbed it should be

completely removed from the body. *Panchakarma* procedures help in the removal of poison from the body and restrict the harmful effect of the poison on the body.

CONCLUSION

Vamanadi Panchakarma mentioned in *Chaturvimshati Upkrama* of *Charak Samhita* is useful in the complete removing of poison from the body. 24 *Upkrama* mentioned in *Charak Samhita* has great importance in an emergency. *Panchkarma* is an important part of *Ayurveda*, and it is used since ancient times to treat various diseases. In the present era also *Panchkarma* use to remove toxins from the body i.e., *Gara visha*, *Dushi visha*, *Sthawar*, and *Jangham visha*, and all types of poisons.

REFERENCES

1. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vishchikitsadhyay 23/31; 545.
2. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vishchikitsadhyay 23/35, 36, 37; 546.
3. Sushrut Samhita of Maharshi Sushruta, vol 2, by Dr. Anantram Sharma, Chaukhamba Surbharti Prakashan, Varanasi, Kalpasthana, Sarpdashtavishchikitsitkalpadhyay 5/11; 551.
4. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vishchikitsadhyay 23/38; 546.
5. Sushrut Samhita of Maharshi Sushruta, vol 2, by Dr. Anantram Sharma, Chaukhamba Surbharti Prakashan, Varanasi, Kalpasthana, Sarpdashtavishchikitsitkalpadhyay 5/3,4; 550.
6. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vishchikitsadhyay 23/39; 546.
7. Sushrut Samhita of Maharshi Sushruta, vol 2, by Dr. Anantram Sharma, Chaukhamba Surbharti Prakashan, Varanasi, Kalpasthana, Sarpdashtavishchikitsitkalpadhyay 5/5,7; 551.

8. Astangahridayam of Srimadvagbhata, by Dr. Brahmanand Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2012, Uttarsthana, Sarpavishpratishedhadhyay, 36/47; 1159.
9. Sushrut Samhita of Maharshi Sushruta, vol 2, by Dr. Anantram Sharma, Chaukhamba Surbharti Prakashan, Varanasi, Kalpasthana, Sarpdashtavishchikitsitkal-padhyay 5/30; 553.
10. Sushrut Samhita of Maharshi Sushruta, vol 2, by Dr. Anantram Sharma, Chaukhamba Surbharti Prakashan, Varanasi, Kalpasthana, Sarpdashtavishchikitsitkal-padhyay 5/15; 552.
11. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vish-chikitsadhyay 23/45; 548.
12. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vish-chikitsadhyay 23/239-240; 572
13. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vish-chikitsadhyay 23/63; 550.
14. Sushrut Samhita of Maharshi Sushruta, vol 2, by Dr. Anantram Sharma, Chaukhamba Surbharti Prakashan, Varanasi, Kalpasthana, Sarpdashtavishchikitsitkal-padhyay 5/20-29; 552.
15. Sushrut Samhita of Maharshi Sushruta, vol 2, by Dr. Anantram Sharma, Chaukhamba Surbharti Prakashan, Varanasi, Kalpasthana, Sarpdashtavishchikitsitkal-padhyay 5/40; 555.
16. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vish-chikitsadhyay 23/65-66; 551.
17. Astangahridayam of Srimadvagbhata, by Dr. Brahmanand Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2012, Uttarsthana, Sarpavishpratishedhadhyay, 36/53-54; 1159.
18. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vish-chikitsadhyay 23/46-47; 548.
19. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vish-chikitsadhyay 23/68-69; 551.
20. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vish-chikitsadhyay 23/49; 548.
21. Sushrut Samhita of Maharshi Sushruta, vol 2, by Dr. Anantram Sharma, Chaukhamba Surbharti Prakashan, Varanasi, Kalpasthana, Sarpdashtavishchikitsitkal-padhyay 5/41; 555.
22. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vish-chikitsadhyay 23/98-100; 555.
23. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vish-chikitsadhyay 23/41; 547.
24. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vish-chikitsadhyay 23/43; 547.
25. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vish-chikitsadhyay 23/96; 554.
26. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vish-chikitsadhyay 23/40-41; 547.
27. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vish-chikitsadhyay 23/50; 547.
28. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vish-chikitsadhyay 23/49; 547.
29. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vish-chikitsadhyay 23/76; 552.
30. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vish-chikitsadhyay 23/54-60; 549.
31. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vish-chikitsadhyay 23/180; 566.

32. Sushrut Samhita of Maharshi Sushruta, vol 2, by Dr. Anantram Sharma, Chaukhamba Surbharti Prakashan, Varanasi, Kalpasthana, Mushikakalpadhyay 7/27-31; 569.
33. Astangahrdayam of Srimadvagbhata, by Dr. Brahmanand Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2012, Uttarsthana, Vishpratishedhadhyay, 35/38; 1148.
34. Astangahrdayam of Srimadvagbhata, by Dr. Brahmanand Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2012, Uttarsthana, Keetalutadivishpratishedhadhyay, 37/75-76; 1174.
35. Sushrut Samhita of Maharshi Sushruta, vol 2, by Dr. Anantram Sharma, Chaukhamba Surbharti Prakashan, Varanasi, Kalpasthana, Mushikakalpadhyay 7/36; 570.
36. Astangahrdayam of Srimadvagbhata, by Dr. Brahmanand Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2012, Uttarsthana, Keetalutadivishpratishedhadhyay, 37/39; 1170.
37. Sushrut Samhita of Maharshi Sushruta, vol 2, by Dr. Anantram Sharma, Chaukhamba Surbharti Prakashan, Varanasi, Kalpasthana, Mushikakalpadhyay 7/37; 570.
38. Sushrut Samhita of Maharshi Sushruta, vol 2, by Dr. Anantram Sharma, Chaukhamba Surbharti Prakashan, Varanasi, Kalpasthana, Mushikakalpadhyay 7/51-52; 574.
39. Astangahrdayam of Srimadvagbhata, by Dr. Brahmanand Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2012, Uttarsthana, Keetalutadivishpratishedhadhyay, 37/77; 1175.
40. Astangahrdayam of Srimadvagbhata, by Dr. Brahmanand Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2012, Uttarsthana, Keetalutadivishpratishedhadhyay, 37/24-25; 1168.
41. Agnivesha, *Charaka Samhita*, vol 2 by Acharya V. Shukla & Prof. R. D. Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2009, Chikitsasthana Vishchikitsadhyay 23/49; 548.
42. Astangahrdayam of Srimadvagbhata, by Dr. Brahmanand Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2012, Uttarsthana, Mushikalrkavishpratishedhadhyay, 38/24; 1180.
43. Astangahrdayam of Srimadvagbhata, by Dr. Brahmanand Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2012, Uttarsthana, Keetalutadivishpratishedhadhyay, 37/70-71; 1174.
44. Sushrut Samhita of Maharshi Sushruta, vol 2, by Dr. Anantram Sharma, Chaukhamba Surbharti Prakashan, Varanasi, Kalpasthana, Mushikakalpadhyay 7/33; 570.
45. Astangahrdayam of Srimadvagbhata, by Dr. Brahmanand Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2012, Uttarsthana, Keetalutadivishpratishedhadhyay, 37/69; 1174.

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