



DASHAMOOLA KWATHA DHARA SWEDA IN KNEE INJURIES – A REVIEW

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ABSTRACT

Knee is the complex joint with many components, making it vulnerable to variety of injuries. Some of the most common injuries include sprain, ligament tear, fractures and dislocations. Many knee injuries can be successfully treated with simple measures such as bracing and rehabilitation while others injuries may require surgery to correct. This is the peculiar study of interest how the panchakarma can help the society either solitary or in additional to modern treatments. *Dhara sweda* is one of the *bahiparimarjan chikitsa* of panchakarma. Another name of this is *parishekha sweda*, in *dhara sweda* different types of *dravyas* can be used like medicated oil, *takra*, *ghrita*, *kwath*. This review focused on *kwatha dhara sweda* in which *dashamoola kwatha* is imbued into the pot and poured over the affected part in the steady stream either as a solitary therapy or with the integration of modern therapies *Dashmoola kwatha* is the combination of ten drugs, an efficacious remedy in inflammation, pain and providing strength to the muscle tone.

KEYWORDS: *Janu sandhi, Abhighataja, Dhara Sweda, Knee Joint, Panchakarma.*

INTRODUCTION

Knee injury accounts for 44.8% of the cases.^[1] Accidental induced knee injury can affect anyone at any age and at any time due to numerous causes. Knee Joint is hinging type of Synovial joint made up of cartilage, bones, ligaments, tendons and muscles that all work together and make it possible for knee joint to perform all its functions.^[2] Instead of its enduring structure any injury to this joint resist physical motion of an individual as it is 'The Joint of Walking.' The injury can be of any type but the symptom first appears is the inflammation. Inflammation is the marker that inform us about something erroneous. The conditions like sprains, strains, tear, bursitis, dislocation, fracture leads to knee joint discomfort, oedema, stiffness, instability and impaired function.

Dhara Sweda which is also known as *Kaya Seka*, *Pizhichil* and *Parisheka* is one of types of *swedana* included in *Bahiparimarjana chikitsa*. In this, different forms of medicated *kwatha*, oil or *takra* is poured in continuous and steady stream from the height of 12

angula (9 inches) on the specific part or on full length of the body.^[3] *Swedana* assist to ease *stambha*, *gauravta*, *shaitya* and cause the body to perspire.^[4] *Dashmoola* which is one of the most used traditional medicine comprised of ten roots i.e., *Laghupanchamoola* and *Brihatapanchamoola* have specifically anti-inflammatory, anti-oxidant action and moderate analgesic effect.^[5]

This review engrossed in *Dashamoola Kwatha Dhara Sweda* either as a single therapy or in the combination of modern therapeutics in the acquired abrasions of knee joint due to any type of injury.

Disease Review

Knee joint which is circumscribed by tough capsule bounded by membrane filled with lubricating synovial fluid. Bursae is the extra capsule of fluid for providing extra cushioning. Unwieldly movements, any collision, fall, excessive use or use with force can result into spectrum of knee injuries like ligament sprains, Tendon

tears, Cartilage tears, Patella femoral pains syndrome, Dislocation or any Fracture.

Ligaments are the tough bands of connective tissue which held the knee joint in position. Any sudden twist with excessive force or rapid halt during running stretch ligament beyond its capacity which can lead to tearing of the ligament and bleed into the knee joint result into pain, swelling and joint laxity. Most injured ligament is ACL which is located in the centre of the knee joint. Tendons are the connective tissue between the muscles and the joints. Stretching beyond its capacity also cause them to tear. Cartilage tear or meniscus tear which can be due to twisting during weight bearing exercises or in the old age due to wear and tear results into swelling, pain and inability to straighten the leg. In patella femoral pain is anticipated in the back of knee cap because of tear of cartilage present at the back of knee cap.^[6] Dislocation is the bone's displacement from its usual location in the knee joint. A patellar dislocation is the most common type of dislocation, which occurs when the kneecap falls out of its groove on the thigh bone. Tibiofemoral dislocation, which occurs when the shinbone and thigh bone lose contact with each other, and femoral condyle fracture-dislocation, which occurs when a fragment of bone breaks off from the end of the thigh bone and slips out of place, are two further forms of dislocation. Fracture is a crack or break in the knee joint's bone. A patellar fracture occurs when the kneecap splits into pieces and is the most common type of fracture. Tibial plateau fracture, which occurs when the top of the shinbone breaks near the knee joint, and femoral condyle fracture, which occurs when the end of the thigh bone breaks near the knee joint.^[7]

Mild ligament and cartilage tear can be healed with *dhara sweda* but extensive ligament tear and cartilage tear usually do not heal by themselves, reconstructive surgery needs to be done and after that for *Brihana* therapy and for speedy recovery *dhara sweda* can be performed. Tendons usually heal by themselves with time and *dhara sweda* will assist patient in reduction of symptoms and faster healing. In dislocations, depositions of the bones followed by *dhara sweda* will strengthen the tissues and surrounding structures.

Drug Review

In *Charaka Samhita*, *Dhara Sweda* named as *Parishekha Sweda* is included in *Saagni Sweda*. As reported, in *vaata* disorders or *vaata* predominant *sansargaj* disorders after proper *abhyanga* patients are covered with cloth and decoctions of *moola* is poured over the affected part with *kumbhi*, *varshulika* or *nadi*^[8] and in accordance with *Acharya Sushruta* and *Acharya Vagbhata* it is *Drava Sweda*. *Dashmoola Dhara Sweda* or *Dashamoola parishekha sweda* is cited in *Vagbhata Samhita* over which *acharya vagbhata* mentioned *dashamoola* processed with *sneha*, *sura*, *sukta*, *vari* (water), *ksheera* are poured on the painful organ with *kumbhiragalnti nadi*.^[9]

Dashamoola consist of 10 roots of different drugs i.e., combination of *Brihatpanchamoola* and *Laghupanchamoola*.

Bilva, *Agnimantha*, *Shyonaka*, *Patala* and *Gambhari* are composed in *Brihtapanchamoola*.

Gokshura, *Brihati*, *Kantakari*, *Shalparni* and *Prishanaparni* are composed in *Laghupanchamoola*.

Table no. 1

Sr.no.	Drug name	Botanical name	Rasa	Guna	Virya	Vipaka	Dosha Karma
1.	Bilva	<i>Aegle marmelos</i>	Kashaye, Tikta	Laghu, Rooksha	Ushana	Katu	Vaatakaphahara
2.	Agnimantha	<i>Clerodendrum phlomidis</i>	Madhura, Katu, Tikta, Kashaye	Laghu, Rooksha	Ushana	Katu	Kaphavaatshamak
3.	Shyonaka	<i>Oroxylum indicum</i>	Madhura, Tikta, Kashaye	Laghu, Rooksha	Ushana	Katu	Vaatakaphahara
4.	Patala	<i>Stereospermum sauvealans</i>	Tikta, kashaye	Laghu, Rooksha	Anushana	Katu	Tridoshahara
5.	Ghambhari	<i>Gmelina arborea</i>	Tikta, Kashaye, Madhura	Guru	Ushana	Katu	Vaatapittahara
6.	Gokshura	<i>Tribulus terrestris</i>	Madhura	Guru, Snigdha	Sheeta	Madhura	Vaatapittahara
7.	Brihati	<i>Solanum indicum</i>	Katu, Tikta	Laghu, Rooksha	Ushana	Katu	Kaphavaatahara
8.	Kantakari	<i>Solanum surattense</i>	Katu, Tikta	Laghu, Rooksha	Ushana	Katu	Kaphavaatahara
9.	Shalparni	<i>Desmodium gangeticum</i>	Madhura, Tikta	Guru, Snigdha	Ushana	Madhura	Tridoshahara
10.	Prishanparni	<i>Uria picta</i>	Madhura, Tikta	Laghu, Snigdha	Ushana	Madhura	Tridoshahara

There are 3 types of *Parisheka Sweda* on the basis of apparatus used

1. *Kumbha parisheka*-medicaments are filled in earthen pot with one small tube fitted to it with its one end opening inside the pot and the other at the rear end of tube. The tube has U shape bend at the centre so that all liquid do not rush at once.

2. *Varshulika parisheka*-it is a pot which have thousands of orifices. Stream of *kwatha* fall like a shower on the body part.

3. *Pranadika parisheka*-it is the combination of both *kumbha* and *varshulika*. In a small pot a tube is attached and the other end of the tube is having cap like structure which have thousands of holes.^[10]

MATERIALS AND METHODS

Table no. 2

Dashamoola kwatha	Approx.2 litres
Kernel/mugs with pointed tip	2
Vessels of 3-5 litres	2
Soft towel	1
Suitable oil for abhyanga	50ml
Gauze	1
Earplugs	2
Medicated water	Q. S
Masseurs	2
Attendant	1

Preoperative procedure

(a) **Preparation of medicine**-200 gm of *dashamoola bharad* is boiled in 4 litres of water and reduced to its half quantity

(b) **Preparation of patient**

1. *Nivata graha* should be selected to avoid any discomfort to the patient.
2. Advise the patient to evacuate all the urges and allow patient to sit or lie as comfortable for the patient on the *droni*.
3. *Abhyanga* is done in specific conditions. In dislocations and fractures *abhyanga* should be avoided. In ligament, tendon or cartilage tear *samvahana* can be done according to the condition of the patient. If *abhyanga* is not performed then specific part should be covered with thin cloth.

Procedure

Kwatha used for the procedure should be heated on the stove. The temperature of the *kwatha* should be kept around 40-degree Celsius. Knee joint part is exposed and *dhara* is poured in continuous and steady stream 6-9 inches above.^[11] *kwatha* used can be collected and reused after heating but daily fresh *kwatha* should be used.

Post operative procedure

Kwatha is wiped off with cotton gauze and cleaned with soft towel and patient is advised take half hour rest.

Duration-10-15 minutes for 7,14 or 21 days^[12]

Precautions

- (a) Temperature and height of 12 angula should be maintained throughout the procedure to provide even sudation.
- (b) Stream poured should be in continuous and uniform manner
- (c) *Nivata graha* should be selected

Complications

Chances of burns if temperature of *kwatha* is too high. Sudation over the longer period of time can result into vasodilatation and decrease in blood pressure over particular part.

DISCUSSION

Dashamoola dhara has been embraced with a priority on reducing *vaata* and *kapha*. *Dravya* applied to the skin is engrossed through *trygami dhamni*^[13] present throughout the body and associated with *romakoopa*. Through *swedana* these *romkoopa* gets opened. The *dravyas* used have *ushana*, *tikshana* and *laghu* qualities which regulate *kapha*, *vaatahara* and *shophara* effects. *Brihata panchamoola* have *vaatakapha shamak* properties and *laghu panchamoola* have *vaata pitta shamaka* properties. The contributes in *dashamoola kwatha* have such characteristics that it can flow into tiny *shiras*(canals). Due to its medical attributes *dashamoola kwatha* speed up the healing process for injured knee joint by lowering swelling, pain and inflammation.

Mode of action

Action of *dashamoola dhara sweda* on knee injury will act in two steps occurs simultaneously. First is through the *sweda* and second is *dashamoola* drugs overall effect.

- *Swedana* action is *stambhagana*, *gauravaghana*, *sheetaghana* and *sweda karaktava*. *Swedana ushana guna* performs *srotoshudhi* and *amapachana* relieves *stambha*. Toxic liquid substances of the body are expelled from the body, as *app tatva* is guru its removal cause lightness (*Gauravaghana*). *Swedana* is primarily *ushana* relieves *sheeta* through the opposite attribute (*Sheetagana*). *Sweda* is the kind of *mala* that draws pollutants from the body (*Sweda karakatva*). It aids in the dissolution of *Kapha*, which is densely adhered to the channels. It also liquefies *Kapha*, allowing it to travel freely (*Srota su abhilivyate*). It softens the channels by

allowing *Vata* to flow regularly (*khani Mardavaum Ayanti*). Due to increase temperature metabolic activity increases, blood pressure increases in the particular part to counteract balance, pores will get open. Together, they all result into absorption of drug more effectively.^[14]

- *Dashamoola* mainly acts on the *vaata dosha* and pacifies it, and also normalise *kapha dosha*. It has beneficial impact on *rasa, mamsa* and *asthi dhatu*. Overall, it has anti-inflammatory, anti-rheumatic, analgesic, antispasmodic and antioxidant effects.^[15]

Dashamoola, the marvellous herbal combination, is blessed with *Kashaya* (astringent flavour), *Madhura Rasa* (sweet taste), *Guru* (heavy), and *Ruksha Guna* (rough quality). It naturally depicts *Ushna Virya* (hot potency) and *Katu Vipaka* (pungent metabolic taste). Because of its *Tridosha nashak* qualities, this remarkable herbal treatment balances all three *doshas*, including *Vata, Kapha*, and *Pitta*. Because of the herbs inherent essential characteristics and *doshas*, it has a good influence on the *Dhatus* (i.e., body tissues) *Rasa* (i.e., Plasma), *Mamsa* (i.e., Muscles), and *Asthi* (i.e., Bones).

CONCLUSION

Thus, *Dashamoola dhara Sweda* plays a crucial role in all the knee injuries either ligament, cartilage tendon tear or dislocations and fracture either solitary or after rehabilitative therapies by providing strength to the muscle, nerves, ligaments, tendons, bones increasing blood circulation and furnish them to heal preliminary. Further *dashamoola* has anti-inflammatory, analgesic and anti-oxidative property which will help to mitigate the localized symptoms of the patient.

Conflict of interest

This research does not received grant from any of the funding agencies.

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