



TRIVRUT AS A DRUG OF CHOICE FOR VIRECHANA KARMA

Dr. Hemant¹, Prof. (Dr.) Rekha Phull², Dr. Reena Rohilla³

¹Ph.D. Scholar, Department of Panchakarma, Indian Medical System, SGT University, Budhera, Gurugram-Badli Road, Gurugram – 122505, Haryana, India.

²Professor & HOD, Department of Kayachikitsa, Indian Medical System, SGT University, Budhera, Gurugram-Badli Road, Gurugram – 122505, Haryana, India.

³Ph.D. Scholar, Department of Prasuti & Stree Roga, Faculty of Indian Medical System, Gurgaon, Shree Guru Gobind Singh Tricentenary University, Gurugram, Haryana.

Corresponding Author- Dr. Hemant, Ph.D. Scholar, Department of Panchakarma, Indian Medical System, SGT University, Budhera, Gurugram-Badli Road, Gurugram – 122505, Haryana, India. **Email id** - dr.hemant.indiaa@gmail.com

ABSTRACT

In *Ayurveda*, there are three main principles that are essential for *Chikitsa*, namely, *Hetu* (cause), *Linga* (symptoms), and *Aushadhi* (medicine). These principles form the cornerstone of *Ayurvedic* treatment and are crucial for successful healing. Understanding the cause of the disease, identifying the symptoms, and administering the appropriate medicine are all essential steps in the healing process. Without these principles, *Ayurvedic* treatment would not be as effective as it is known to be. *Aushadhi* knowledge holds significant importance in *Chikitsa* principles and is emphasized by almost all *Acharyas*. The concept of *Chatuspada* includes *Aushadhi* as a crucial pillar in treatment. *Shodhana Karma* holds a significant position among the benefits provided by *Panchakarma*, which is an important specialization in *Ayurvedic* sciences. This *Ayurvedic* practice offers several advantages to both healthy and diseased individuals. One of the main treatments, *Virechana Karma*, is used to eliminate excessive morbid *Doshas* from *Adhobhaga*. The initial section of the *Nirdesha Chatushka*, *Khuddakachatushpada*, focuses on the Quadruple of Therapeutics which comprehensively describes all the aspects of therapeutics intended for both healthy individuals and those suffering from illnesses. The importance of medicine (*Dravya*) is significant in the *Chikitsa* among *Chatuspada*. *Acharya Charka* elaborates in the same chapter about the attributes of perfect medicine in *Ayurveda*. As per the ancient texts, numerous *Dravyas* are attributed to *Virechana*, but *Trivrut* is considered the most excellent among them. The aim is to examine the superiority of *Trivrut* in accordance with the classical texts and affirm it as the drug of choice for *Virechana Karma*.

KEYWORDS: *Trivruta*, *Virechana*, *Ayurveda*, *Panchakarma*

INTRODUCTION

Trivrut is regarded as the most effective drug for *Sukhavirechana* according to *Ayurveda*'s classical text.¹ However, there are varying opinions on the types of *Trivrut* available. Some classical texts mention *Shyama*, *Aruna*, *Shukla*, and *Mahashyama* as the varieties. The significance of *Trivrut* is highlighted by the fact that *Charaka Samhita* has a complete chapter dedicated to the drug (*Shyamatrivrut Kalpadhyaya*) and it is included in different *Ganas* (groups of drugs) in classical texts. *Trivrut* is a crucial component in 765 formulations and is utilized in 23 different types of medicine, both internal and external, for various purposes. It is used in the treatment of 107 different medical conditions.² There are



54 combinations of *Trivrut* and its varieties, along with different drugs and vehicles like milk, yogurt, and honey, that are beneficial for *Virechana Karma*. Different combinations of drugs were used to pacify *Vata*, *Pitta*, and *Kapha Dosha*, along with *Virechana Dravyas* that were specific to the season.² *Trivrut* is being used as a single drug or a compound formulation in many diseases where *Virechana Karma* is required as a part of treatment.² The *Ayurvedic Pharmacopoeia* of India has recommended *Operculina turpethum* as the source drug for *Trivrut*.³

The selection of a drug is crucial in the *Chikitsa* principle, as it aims to minimize complications and maintain consistency. However, the use of drugs is heavily dependent on the physician's judgment and, therefore, cannot be standardized for all patients. Nonetheless, the concept of the drug of choice can be applied. The term "*Shrestha*" may be used to refer to the preferred drug, which is *Trivrut* for *Virechana Karma* as mentioned in the *Samhitas*¹. The use of a *Shodhana* drug is associated with certain properties including the ability to achieve the desired effect with the least amount of drug dose required (*Alpa Matra*), expel *Dosha* promptly (*Maha Vegama*), effective removal of *Dosha* to a greater extent with ease (*Bahudoshaharama Sukhama*), ability to pacify disease (*Vyadhinashanam*), and not causing any complications or discomforts (*Avikari Cha Vyapatto*).⁴ *Acharya Charka* suggests that an ideal drug should be abundantly available (*Bahuta*), have wide applicability (*Yojnyatva*), be prepared in many forms and processes (*Anekavidha Kalpana*), and have dependable and valuable qualities (*Sampath*).⁵ Meeting these qualities is essential to make a medicine *Shrestha* and Drug of Choice. Therefore, this review article aims to examine the superiority of *Trivrut* in accordance with the classical texts and affirm it as the drug of choice for *Virechana Karma*.



Figure no. 1 showing the full plant of *Trivruta*

MATERIAL AND METHODS

Classical texts such as *Bruhatrayi*, *Laghtrayi*, *Bhela Samhita*, and *Haritasamhita*, as well as eight compendia (*Samgrahagranthas*) such as *Yogaratanakara*, *Bhaishajyaratnavali*, and *Sahasrayoga* were consulted. The English equivalents are as per the Namaste Portal, Ministry of Ayush, Government of India (<http://namstp.ayush.gov.in/#/sat>).

SYNONYMS OF TRIVRUT

A total of 25, 29, and 33 synonyms have been assigned to *Aruna*, *Shyama*, and *Trivrut*, respectively. In *Dhanvantari* and *Bhavprakash Nighantu*, 8 and 9 synonyms have been attributed to the *Shukla* variety of *Trivrut*.² *Sarwanubhuthi* defines *Trivrut* as a safe *Virechaka Dravya* by many people, while *Kumbha*, *Kutarana*, *Sarala*, and *Rechani* describe



its *Virechana* action. *Palindi* explains that it provides protection against *Pitta Jwara*, and *Tribandi* highlights its ability to fight against three *Doshas*.⁶

CLASSIFICATION

Trivrut falls into various drug categories, including *Virechana Dravya*, *Virechanopa Dravya*, *Adhobhagahara Varga*, *Eksara Gana*, *Mulini Varga*, *Tiktaka Varga*, *Mulasava*, *Asthapanopaga*, *Bhedaniya*, *Shyamadi Gana*, *Mustadi Gana*, *Shakavarga*, *Vishagnaha*, *Madhura Skandha*, and others by various texts. Classification is mentioned in Table No. 1. And Table No. 2

Table no. 1 showing the Classification of <i>Trivrut</i>			
Kingdom	Plantae	Order	Solanales
Sub kingdom	Tracheobionata, vascular plants	Family	Convolvulaceae
Super division	Spermatophyta, seed plants	Genus	Operculinav
Division	Angiosperma	Species	O. turpethum (L.) Silva Manso
Class	Dicotyledons		

Table no. 2 showing the Classification of <i>Trivrut</i> as per <i>Ayurveda</i> Classics			
Charak Samhita	<i>Bhedaneeya, Vishaghna, Asthapanopaga Gana</i>	Sushruta Samhita	<i>Shyamadi Gana, Adhobagahara Gana, Tiktha Vargam</i>
Vagbhata	<i>Virechana, Niruhana, Shyamadi Gana</i>	Bhava Prakasha Nighantu	<i>Guduchyadi Varga</i>
Dhanvanthari Nighantu	<i>Guduchyadi Varga</i>	Raja Nighantu	<i>Pippalyadi Varga</i>

RASAPANCHAKA

Opinions on the *Rasapanchaka* of *Trivrut* differ among the *Aruna*, *Syama*, and *Shukla* varieties. According to *Acharya Charaka*,⁷ *Trivrut* has a *Kashaya* and *Madhura Rasa*. However, if we consider the beliefs of other *Acharyas*, *Trivrut* also has *Tikta* and *Katu Rasa*. Almost all *Acharyas* agree that *Trivrut* has *Ruksha Guna* with *Ushna Virya* and *Katu Vipaka*. Additionally, all *Acharyas* believe that *Virechana* is a *Karma* of *Trivrut* with *Kaphapittanashaka* and *Vataprakopaka Doshaghna*.

CHEMICAL CONSTITUENTS

Within *Trivrut's* root bark lies a notable concentration of turpeth resin, which boasts a prominent glycoside known as 'turpethin' comprising approximately 10% of the resin's composition. Additionally, *Trivrut* contains turpethinic acids A, B, C, D, and E, alongside ether-soluble resin, volatile oil, albumin, starch, lignin salts, ferric oxide, Scopoletin, Betulin, lupiol, and beta-sitosterol. The laxative effect of *Trivrut* is mainly due to the presence of turpethin,^{8,9,10}

PROPAGATION AND CULTIVATION¹¹

Trivrut, also known as *Operculina turpethum*, is a medicinal plant that can be propagated through seeds or layering. For better germination, it is recommended to treat the seeds with hot water. The seedlings are best transplanted between June and July. It is



advisable to harvest the roots 18 months after plantation when the resin content in the roots has reached its optimum level.

PHARMACOLOGICAL ACTIVITIES¹²

The following are some of the activities exhibited by certain compounds or substances: antibacterial (able to destroy bacteria), anti-inflammatory (able to reduce inflammation), anti-secretory (able to reduce the secretion of certain substances), antimicrobial (able to destroy microorganisms), anti-diabetic (able to reduce blood sugar levels), hepatoprotective (able to protect the liver), and cytotoxic (able to destroy cells) analgesic, anti-arthritic, and anti-inflammatory activities.

TRIVRUT YOGA (Formulations)

Different types of formulations are prepared using Virechana dravya such as *Varti Kriya*, *Churana*, *Avelaha*, *Sneha*, *Kashaya*, *Mamsaras*, *Yusha*, *Kambaillka*, *Yavagu*, *Ksheera*, *Modaka*, etc.¹³ *Trivrut Moola* is available in two types, namely *Shyama* and *Aruna*. Among the two, *Aruna Moola* is the best and is used in individuals with delicate health, children, aged people, and those with *Mridu Kosta*. *Shyama Moola* is a rapidly acting irritant that causes confusion, dehydration, and unconsciousness, and can cause irritation in the chest and throat. It is used in individuals with *Bahu Dosha* and *Krura Kosta*.¹⁴ Number of formulations by *Trivrut* per *Acharya Charaka* are mentioned in Table no. 3. Table no. 4 shows the description of some of the *Yogas* mentioned by various *Acharyas*. After analyzing data from 18 different sources, *Trivrut* was identified as an ingredient in 765 formulations that are used to treat 107 different disease conditions.² The *Charaka Samhita's Shyamatrivrut Kalpadhyaya* lists 110 combinations of *Trivrut* for its laxative action.² Additionally, *Trivrut* is the main ingredient in purgative preparations used for *Virechana Karma*. Classical texts mention 54 different combinations of *Trivrut* with other drugs and vehicles, such as sugar, honey, *Ghruta*, and *Draksha*, to pacify *Vata*, *Pitta*, and *Kapha Dosha* respectively.² Season-specific *Virechana* preparations of *Trivrut* with various drug combinations are also discussed, with dosage forms like *Churna*, *Avaleha*, *Gutika*, and *Kwatha*. *Trivrut* can be used with different vehicles to pacify *Vata* and *Pitta Dosha*, with *Sura*, *Sauviraka*, *Madhya*, *Godughdha*, and *Ghruta* being some of the recommended options.²

Table no. 3 showing the Number of <i>Trivrut</i> <i>Yogas</i> as per <i>Acharya Charaka</i> ¹⁵		
<i>Amla Yoga</i> – 9	<i>Ksheeradi Yoga</i> – 7	<i>Modaka Yoga</i> – 5
<i>Saindhavadi Yoga</i> - 12	<i>Leha Yoga</i> – 8	<i>Ghrita</i> and <i>Ksheera Yoga</i> – 4
<i>Mutra Yoga</i> – 18	<i>Sarkara Yoga</i> – 4	<i>Tarpana</i> and <i>Churna Yoga</i> -2
<i>Madhuyashti Yoga</i> – 2	<i>Panaka Yoga</i> – 5	<i>Madhaya Yoga</i> -2
<i>Jivakadi Yoga</i> – 14	<i>Ritu Yoga</i> – 6	<i>Sauviraka</i> , <i>Tushodaka Yoga</i> -2
<i>Kshadavadi Yoga</i> -10		Total <i>Yogas</i> - 110

Table no. 4 showing the description of <i>Yogas</i>	
S. No.	<i>Yoga</i>
<i>Charaka Samhita</i>	
1.	For <i>Kaphavataja</i> disorders, a dose of 1 <i>Aksha</i> (12gm) of <i>Kalka</i> of <i>Moola Twaka</i> is



	taken and administered with any of the following - <i>Go, Avika, Aja Mahisha Mutra</i> , or with <i>Sauviraka, Tushaodaka, Prasanna</i> and <i>Triphala Kwath</i> . ¹⁶
2.	To treat <i>Kaphavataja</i> disorders, warm water is mixed with one part of any of the <i>Saindhavadi</i> 12 drugs (<i>Saindhava, Sauvarchala, Kalaa, Vida, Pakya, Anooopa, Koupa, Balu, Elya, Molaka, Samudra, Romaka Lavana</i>) or [Gangadhara's view <i>Saindhava, Samudra, Vida, Audhabhida Lavana</i> and eight types of <i>Mutra</i> (urine) of sheep, goat, cow, buffalo, elephant, camel, horse, donkey], along with one part of <i>Sunthi</i> powder and two parts of <i>Trivrut</i> powder. ¹⁷
3.	For <i>Kaphavataja</i> disorders, <i>Trivrut</i> powder is mixed with any one of the following 18 drugs in equal parts and administered along with cow urine: <i>Pippali, Pippali Moola, Maricha, Gajapippali, Sarala, Kilima, Hingu, Bhrangi, Tejowati, Mushtaka, Hemvati, Pathya, Chitraka, Rajani, Vacha, Swarna-sksheeri, Ajamoda, Kshringabhera</i> . ¹⁸
4.	For <i>Vatapittaja</i> disorders, <i>Trivrut</i> powder is mixed with <i>Madhuyashti</i> in ½ parts and administered along with <i>Shakrambu</i> (water mixed with sugar). ¹⁹
5.	For <i>Vatapittaja</i> disorders, <i>Trivrut</i> powder is mixed with any one of the following 15 drugs in parts and administered along with water mixed with sugar: <i>Jivaka, Hrishabhaka, Meda, Kshrarani, Karkatkshringi, Mudagparni, Mashaparni, Maha Kshravani, Kakoli, Ksheerakakoli, Indra, Chinnaruha, Ksheerashukala, Payasya, Yashati</i> . ²⁰
6.	For <i>Vatapittaja</i> disorders, any one of the following 7 liquids in ½ parts is mixed with <i>Trivrut</i> powder in 1 part and administered: <i>Ksheera, Mamsarasa, Ikshurasa, Karshmarya Rasa, Draksha Rasa, Pilu Rasa, Ghrita</i> . ²¹
7.	For various ailments such as <i>Sannipataja Jwara</i> , stiffness, burning sensation, and thirst, <i>Trivrut</i> powder is taken in equal parts with <i>Ajagandha, Tunga-Ksheeri, Vidari</i> , and <i>Sarkara</i> along with <i>Madhu</i> and <i>Ghrita</i> . ²²
8.	The <i>Kalka</i> and <i>Kwath</i> of <i>Shyama</i> and <i>Trivrut, Sarkara</i> is made into <i>Avaleha</i> and administered in a dose of <i>Panitalam</i> for treating certain ailments. ²³
9.	<i>Avleha</i> is prepared by heating <i>Madhu</i> and <i>Sarkara</i> to form a syrup and then adding <i>Trivrut Churana, Twaka, Patra</i> , and <i>Maricha</i> . This <i>Avleha</i> is used for <i>Virechana</i> in delicate people. ²⁴
10.	A formulation is prepared by heating <i>Ikshu Rasa, Draksha Rasa, Peelu Rasa</i> , and <i>Parushaka Rasa</i> along with <i>Sitopala</i> (sugar) and then adding <i>Kudava, Madhu</i> , and ½ <i>Kudava Trivrut Churna</i> . This formulation is used for vitiated <i>Pitta</i> in delicate people. ²⁵
11.	Various forms of formulations like <i>Sarkara, Modaka, Varti, Gutika, Mamsa, Apupa</i> are prepared in a similar way for <i>Pittaja Vikar</i> . ²⁶
12.	<i>Pippali, Shunthi, Kshara, Shyama</i> , and <i>Trivrut</i> are mixed with <i>Madhu</i> and administered for <i>Kaphaja</i> disorders. ²⁷
13.	A preparation called <i>Avleha</i> is made using <i>Matulunaga Rasa, Abhaya Rasa, Amalaki Rasa, Shriparni Rasa, Kola Rasa</i> , and <i>Dadima Rasa</i> , which are fried in <i>Taila</i> . After that, <i>Sarkara, Kapitha pulp</i> , and other <i>Amla Dravya</i> are added. Then <i>Trivrut, Twaka, Patra, Naga-Keshara, Ela Churna</i> , and <i>Madhu</i> are added. This formulation is used for <i>Kaphaja disorders</i> of delicate people. Similar formulations like <i>Panaka, Rasa</i> ,



	<i>Yusha, Modaka, Raga, Kshadava</i> are prepared for <i>Kaphaja</i> disorders using similar content as above. ²⁸
14.	<i>Saktu</i> is made by mixing <i>Dalachini</i> in 1 part, <i>ela</i> in 1 part, <i>Neelika</i> in 2 parts, <i>Trivrut</i> in 4 parts, <i>Sarkara</i> in 8 parts, <i>Amla Phala Rasa</i> , <i>Madhu</i> , and <i>Saktu</i> together. This <i>Tarpana</i> formulation is used for delicate people with <i>Vata, Pitta, and Kaphaja disorders</i> and <i>Mandaagni</i> (low digestive power). ²⁹
15.	A <i>Modaka</i> (large pill ball) is formulated with <i>Sarkara, Triphala, Shyama, Trivrut, Pippali</i> , and <i>Madhu</i> and administered in <i>Sannipataja</i> disorders, <i>Urdhwa Raktapitta</i> , and <i>Jwara</i> . ³⁰
16.	<i>Ghrita</i> and <i>Madhu</i> are mixed with <i>Trivrut Moola</i> 3 Shana (~9 grams), <i>Triphala Churna</i> 3 Shana, <i>Vidanga, Pippali, Kshara</i> each 1 Shana (3 grams), or made into <i>Modaka</i> with <i>Guda</i> . During the administration of this formulation, no restrictions are followed. This formulation is used in <i>Gulma, Pleehaudar, Swasa, Hallimaka, Arochaka</i> , and similar <i>Kaphavata</i> disorders. ³¹
17.	<i>Kalyanaka Guda</i> is prepared with <i>Vidanga, Pippalimoola, Triphala, Dhanyaka, Chiktraka, Maricha, Indrayava, Ajaji, Pippali, Hastipippali, Lavan, Ajamoda Churna</i> each 1 Karsha (12 grams), <i>Tila Taila</i> 8 Pala (-384 grams), <i>Trivrut Churna</i> 8 Pala, <i>Amlaki Rasa</i> 3 Prastha (2304 grams), <i>Guda Va Tula</i> (2400 grams) are heated on mild flames. Then <i>Udambara</i> -like pill balls are prepared. During the administration of this formulation, no restrictions are followed. This formulation is used in <i>Mandagni, Jwara, Murcha, Mutrakricha, Arochaka, Aswapana</i> (insomnia), <i>Gatrashoola</i> (generalized body pain), <i>Kasa, Swasa, Bhrama, Kshaya, Kustha, Kamala, Meha, Gulma, Udara, Bhangandhara, Grahni, Pandu, and Punsavana</i> (increase Male Fertility). This formulation can be administered in any season. ³²
18.	<i>Vyoshadi Gutika</i> is made by mixing <i>Vyosha, Twaka, Patra, Mushta, Vidanga, Amalaka, and Abhaya</i> in equal parts, <i>Danti Moola</i> in 2 parts, <i>Trivrut</i> 8 parts, <i>Sarkara</i> in 6 parts, and <i>Madhu</i> . This <i>Gutika</i> is administered with the help of cold water in the early morning. It is used in <i>Mutrakriccha, Jwara, Vamana, Kasa, Swasa, Bhrama, Kshaya, Tapa, Pandu, and Alpaagni</i> . No restrictions are followed during the administration of this formulation. It is best for <i>Virechana</i> in all types of <i>Visha</i> and <i>Mutra Vikara</i> . ³³
19.	<i>Pathyadi Modaka</i> is made by using <i>Haritaki, Amalaki, and Eranda</i> all together in a quantity of 2 <i>Prastha</i> (~1536 grams), and <i>Trivrut</i> 1 Pala (- 48 grams). 10 <i>Modakas</i> are formed with this content and used for <i>Virechana</i> in delicate people. ³⁴
20.	<i>Modaka</i> is equivalent to <i>Udambar Phala</i> is made by using <i>Trivrutadi Modaka</i> , which contains 1 Karsh each of <i>Trivrut, Hemwati, Shyama, Neelini, Hastipippali, Pippali Moola, Mustafa, Ajmoda, and Durlabha</i> , along with 1 Pala of <i>Shunthi</i> and 20 Pala of <i>Guda</i> (~960 grams). A fine powder is then dusted on this <i>Modaka</i> , which includes the following ingredients: <i>Hingu, Sauvachala, Yosha, Yavani, Vida, Jiraka, Vacha, Ajagandha, Triphala, Chavya, Chitraka, Dhanyaka, Tumbru, and Dadima</i> . This formulation is used to relieve pain in <i>Trika, Vankshana, Hridya, Basti, Kostha, and Pleeha</i> , and to treat <i>Arsha, Hikka, Kasa, Aruchi, Swasa, Kapha-Javridhhi, and Udavarta</i> . ³⁵



21.	During the rainy season, a mix of <i>Trivrut</i> , <i>Kutaja Beeja</i> , <i>Pippali</i> , and <i>Shunthi</i> in equal parts is given with <i>Madhu</i> and <i>Draksha Rasa</i> for <i>Virechana</i> , as per. ³⁶
22.	during the <i>Sharad Ritu</i> , a mix of <i>Trivruta</i> , <i>Durlabha</i> , <i>Musta</i> , <i>Sarkara</i> , <i>Udichaya</i> , <i>Chandana</i> , <i>Madhuyashati</i> , and <i>Saptala</i> in equal parts is given with <i>Draksha Rasa</i> for <i>Virechana</i> . ³⁷
23.	During the winter season, a mixture of <i>Trivrut</i> , <i>Chitraka</i> , <i>Patha</i> , <i>Ajaji</i> , <i>Sarala</i> , <i>Vacha</i> , and <i>Swarnaksheeri</i> in equal parts, along with warm water, is recommended for <i>Virechana</i> . ³⁸
24.	For <i>Virechana</i> during the summer season, a combination of <i>Trivrut</i> and <i>Sarkara</i> in equal parts is advised. ³⁹
25.	A mix of <i>Trivrut</i> , <i>Trayamana</i> , <i>Saptala</i> , <i>Katurohini</i> , and <i>Swarnaksheeri</i> , all in equal parts, should be processed for three days in <i>Gomutra</i> . This formulation can be administered in all seasons to the <i>Snigdha</i> subject for <i>Virechana</i> . ⁴⁰
26.	A mixture of <i>Trivrut</i> , <i>Shyama</i> , <i>Durlabha</i> , <i>Vatsaka</i> , <i>Hastipippali</i> , <i>Nilani</i> , <i>Triphala</i> , <i>Musta</i> , and <i>Katuka</i> , all in equal parts and in the dose of <i>Panitala Matra</i> , is administered with <i>Ghrta</i> , <i>Mamsarasa</i> , and <i>Ushna Udaka</i> to the <i>Ruksha body</i> . ⁴¹
27.	For <i>Gulma</i> and <i>Parshawa Shoola</i> , a mix of <i>Triushana</i> , <i>Triphala</i> , <i>Hingu</i> , and all eight <i>Dravya</i> in the dose of 1 <i>Karsha</i> (~12 grams), <i>Trivrut</i> 1 <i>Pala</i> (~48 grams), <i>Sauvarchala</i> ½ <i>Karsha</i> (6grms), and <i>Amlavetsa Pala</i> (24 grams), along with <i>Sarkara</i> in the same quantity as all other contents, is administered with <i>Madhya</i> (alcohol) or any <i>Amla Dravya</i> . After <i>Virechana</i> , <i>Mamsarasa</i> and <i>Odana</i> should be served in meals. ⁴²
28.	A mixture of <i>Trivrut</i> , <i>Triphala</i> , <i>Danti</i> , <i>Saptala</i> , <i>Iyosha</i> , and <i>Saindhava</i> powder should be processed for <i>Saptaha</i> (seven days) in <i>Amalaka Rasa</i> . This powder can be administered with <i>Tarpana</i> , <i>Yusha</i> , <i>Mamsaras</i> , or <i>Raga</i> as <i>Anupana</i> . ⁴³
29.	In order to treat <i>Gulma</i> , a formulation is made by processing <i>Ghrta</i> with equal parts of <i>Amla Dravya</i> and <i>Trivrut Kalka</i> and it is administered. ⁴⁴
30.	<i>Ghrta</i> is processed with <i>Kwath</i> of <i>Shyama</i> , <i>Trivrut</i> , and <i>Amalak</i> and it is given for <i>Virechana</i> . ⁴⁵
31.	For <i>Virechana</i> , <i>Ghrta</i> or <i>Ksheera</i> is processed with <i>Kwath</i> of <i>Shyama</i> and <i>Trivrut</i> . ⁴⁶
32.	To make <i>Trivrut Arishta</i> , <i>Trivrut</i> and <i>Nakha</i> (8 <i>Sanakhamushti</i>) are boiled with water (1 <i>Dhrona</i>) and reduced to half. The mixture is filtered, and 1 <i>Tula</i> (4800 grams) <i>Guda</i> is added to it. A <i>Snigdha</i> earthen pot is taken and coated inside with <i>Madhu</i> , <i>Pippali</i> , <i>Phala</i> , and <i>Chitraka</i> . The previously prepared decoction is placed in this pot and it is sealed for a month. After completion of fermentation, the product is filtered and filled into bottles. <i>Trivrut Kwath</i> and <i>Kinwana</i> are also used. This <i>Arishta</i> is used for <i>Virechana</i> in <i>Ghrani</i> , <i>Pandu</i> , <i>Gulma</i> , and <i>Svathu</i> . An alternative formulation is <i>Sura</i> . ⁴⁷
33.	<i>Sauviraka</i> is prepared by boiling <i>Yava</i> , <i>Shyama</i> , and <i>Trivrut</i> with water. The mixture is placed in an oiled pot which is sealed for six days. After fermentation is completed, <i>Sauviraka</i> is prepared for <i>Virechana</i> . ⁴⁸
34.	<i>Tushodaka Yoga</i> is prepared by roasted <i>Tusha</i> and <i>Yava</i> . It is administered with <i>Trivrut powder</i> . ⁴⁹



35.	To administer <i>Virechana</i> formulation, <i>Trivrut Churna</i> is taken along with <i>Badara</i> , <i>Shadava</i> , <i>Raga</i> , <i>Leha</i> , <i>Modaka</i> , <i>Utkartika</i> , <i>Tarpana</i> , <i>Panaka</i> , <i>Mamsarasa</i> , <i>Yusha</i> , and <i>Madhya</i> . For pleasant taste, <i>Twaka</i> , <i>Nagakeshara</i> , <i>Amrataka</i> , <i>Dadima</i> , <i>Ela</i> , <i>Sitopala</i> , <i>Makshika</i> , <i>Matulunga</i> , <i>Madhya</i> , and <i>Amla</i> are added. ⁵⁰
<i>Sushruta Samhita</i>	
1.	A combination of <i>Trivrut Moola</i> powder, <i>Saindhava Lavana</i> , <i>Sunthi</i> , and <i>Amla Dravya</i> in <i>Vata</i> dominant conditions is administered after processing in <i>Kwath</i> of <i>Virechaka Dravya</i> . ⁵¹
2.	<i>Trivrut Churna</i> is given with <i>Ikshu Vikar</i> or <i>Madhura Rasa Dravya</i> or with <i>Ksheera</i> in <i>Pitta</i> dominance. ⁵²
3.	In cases where <i>Kapha</i> dominates, a combination of <i>Trivrut Churna</i> , <i>Guduchi</i> , <i>Arishta</i> , <i>Triphala Rasa</i> , <i>Trikatu</i> , and <i>Mutra</i> is administered as a treatment. ⁵³
4.	<i>Trivrut Churna</i> is used in conjunction with <i>Trivaranaka</i> , <i>Triushana</i> , and <i>Guda</i> to treat <i>Kaphaja</i> disorders. ⁵⁴
5.	To create an <i>Avleha</i> , <i>Trivrut Swarasa</i> one <i>Prastha</i> (~768 grams), <i>Trivrut Kalka</i> one <i>Kudava</i> (~192 grams), <i>Saindhava Lavana</i> and <i>Sunthi Churna</i> each one <i>Karsha</i> (12 grams) are processed together. ⁵⁵
6.	A combination of <i>Trivrut Kalka</i> , <i>Sunthi Churna</i> , <i>Saindhava Lavana</i> , and <i>Gomutra</i> is given together. ⁵⁶
7.	<i>Saindhava Lavana</i> and <i>Gomutra</i> are given along with <i>Trivrut</i> , <i>Sunthi</i> , <i>Harithaki</i> , <i>Pakwa Puga Phala</i> , <i>Vidanga</i> , <i>Maricha</i> , and <i>Devadaru</i> in certain proportions. ⁵⁷
8.	<i>Trivrut Churna</i> is processed in <i>Trivrut Kwath</i> and then <i>Ghrita</i> processed with <i>Trivrut Kwath</i> and <i>Kalka</i> is used to make it into a tablet. ⁵⁸
9.	<i>Trivrut Churna</i> is mixed with <i>Trijata</i> powder and sugar syrup made from jaggery to form <i>Gutika</i> . ⁵⁹
10.	<i>Gutika</i> is prepared using <i>Trivrut Churna</i> in a ratio of 1:4 with <i>Trivrut Kwath</i> , which is then dried. Wheat is processed with <i>Trivrut Kwath</i> vapors and mixed with the prepared powder, jaggery-based sugar syrup, <i>Trijata</i> powder, and <i>Ghrita</i> made from <i>Trivrut Kalka</i> and <i>Kwath</i> to make <i>Gutika</i> . ⁶⁰
11.	<i>Munga</i> is processed in <i>Trivrut Swarasa</i> or <i>Kwath</i> , which is then used to make <i>Yusha</i> with <i>Saindhava Lavana</i> and <i>Ghrita</i> . ⁶¹
12.	In <i>Pittaja</i> disorders, <i>Ikshu Kanda</i> is split from the middle and <i>Trivrut Kalka</i> paste is applied inside, after which it is subjected to <i>Putpaka</i> processing. ⁶²
13.	A mixture of <i>Sarkara</i> , <i>Ajagandh</i> , <i>Twaka</i> , <i>Ksheera Vidari</i> , and <i>Trivrut</i> in equal proportions is powdered and administered with <i>Madhu</i> and <i>Ghrita</i> for <i>Daha</i> and <i>Jwara</i> . ⁶³
14.	To perform <i>Virechana</i> on people with delicate health, a mixture containing <i>Sarkara</i> , <i>Madhu</i> , <i>Trivrut Churna</i> , and one-fourth parts of <i>Twaka</i> , <i>Patra</i> , and <i>Maricha</i> is administered. ⁶⁴
15.	<i>Avleha</i> is prepared for <i>Pittaja</i> disorders by mixing <i>Sarkara</i> One <i>Pala</i> , <i>Madhu</i> half <i>Kudava</i> (92 grams), and <i>Trivrut Churna</i> . ⁶⁵
16.	For the treatment of <i>Kaphja</i> disorders, <i>Trivrut</i> , <i>Shyama</i> , <i>Yavakashara</i> , <i>Shunthi</i> , and <i>Pippali</i> powder are mixed with <i>Madhu</i> . ⁶⁶



17.	To treat delicate people with <i>Kaphaja</i> disorders, <i>Haritaki</i> , <i>Kasmarya</i> , <i>Amalaki</i> , <i>Dadima</i> , and <i>Badara</i> are fried in castor oil and processed in <i>Rasa</i> of <i>Amla Phala</i> . Powder of <i>Trisugandhi</i> , <i>Trivrut</i> , and <i>Madhu</i> are added to form <i>Avleha</i> . ⁶⁷
18.	In <i>Santrapana</i> and <i>Sannipataja</i> disorders, a mixture containing <i>Neelani</i> , <i>Twaka</i> , and <i>Ela</i> each one part, <i>Sakara</i> three parts, <i>Trivrut</i> , and <i>Madhu</i> is administered with <i>Rasa</i> of <i>Amla Phala</i> . ⁶⁸
19.	To treat <i>Sannipataja</i> disorders, <i>Urdhawaratapitta</i> , and <i>Jwara</i> , a mixture of <i>Trivrut</i> , <i>Shyama</i> , <i>Pippali</i> , <i>Haritaki</i> , <i>Bhibataki</i> , and <i>Amalaki</i> in equal parts is given with <i>Madhu</i> in the form of <i>Modaka</i> . ⁶⁹
20.	<i>Kapha</i> and <i>Vataja</i> disorders, <i>Gulma</i> , <i>Pleeha Roga</i> , <i>Udara Roga</i> , and <i>Halimaka</i> can be treated using a formulation consisting of <i>Trivrut</i> (three parts), <i>Triphala</i> (three parts), <i>Yavakshara</i> (one part), <i>Pippali</i> (one part), <i>Vidanga</i> (one part), and <i>Madhu</i> . It can be mixed with <i>Ghrta</i> or made into <i>Gutika</i> using jaggery. This formulation is safe and does not create any complications. ⁷⁰
21.	To induce <i>Virechana</i> in <i>Ruksha</i> individuals, a mixture of <i>Shyama</i> , <i>Trivrut</i> , <i>Neeli</i> , <i>Kutaki</i> , <i>Mustaka</i> , <i>Durlabha</i> , <i>Chavya</i> , <i>Indrayava</i> , and <i>Triphala</i> is given with <i>Ghrta</i> , <i>Mamsarasa</i> , or water. ⁷¹
22.	In winter, <i>Sheetal Kwath</i> of <i>Virechana Dravya</i> (three parts) and jaggery (two parts) are fermented together for one month. In summer, it can be fermented for fifteen days. ⁷²
23.	Bolus made from rice and <i>Masha</i> processed in <i>Kwath</i> of <i>Virechana</i> roots and fermented with yeast to form <i>Sura</i> . ⁷³
24.	<i>Kwath</i> and <i>Kalka</i> are prepared from equal parts of the roots of <i>Virechana Dravya</i> , <i>Vidarigandhadigana</i> , <i>Brihatpanchmola</i> , <i>Murva</i> , <i>Kshangeshta</i> , <i>Sudha</i> , <i>Hemvati</i> , <i>Triphala</i> , <i>Ativisha</i> , and <i>Vacha</i> . Crushed <i>Yava</i> (without outer covering) is processed in <i>Kwath</i> and roasted, then fermented with <i>Kwath</i> and <i>Kalka</i> to prepare <i>Sauviraka</i> . ⁷⁴
25.	<i>Kwath</i> is formed from equal parts of the roots of <i>Virechana Dravya</i> , <i>Vidarigandhadigana</i> , <i>Brihatpanchmola</i> , <i>Murva</i> , and <i>Kshangeshta</i> . <i>Kwath</i> is processed with <i>Yava</i> with outer covering and <i>Meshirangi</i> . <i>Kalka</i> is prepared from the remaining parts, and processed <i>Yava</i> , <i>Kwath</i> , and <i>Kalka</i> are fermented together to form <i>Tushodaka</i> . <i>Tushambu</i> and <i>Sauviraka</i> are prepared similarly, and they usually take six or seven days to prepare. ⁷⁵
<i>Astanga Hridaya</i>	
1.	A combination of <i>Trivrut Churna</i> , <i>Shunti</i> , and <i>Saindhava Lavana</i> is recommended for treating <i>Vata</i> disorders along with <i>Amla Dravya</i> . ⁷⁶
2.	To manage <i>Pitta</i> disorders, <i>Trivrut Churna</i> , <i>Ghrta</i> , <i>Madhu</i> , and <i>Shakra</i> are given with <i>Madhura Dravya</i> like <i>Ksheera</i> , <i>Draksha Rasa</i> , <i>Ikshurasa</i> , <i>Gambhari Rasa</i> , or <i>Triphla Kwath</i> . ⁷⁷
3.	In <i>Kaphaja</i> disorders, <i>Trivrut Churna</i> and <i>Panchkoola</i> are given with <i>Peelu Rasa</i> , <i>Gomutra</i> , <i>Madhya</i> , <i>Amlarasa</i> , or <i>Kanji</i> . ⁷⁸
4.	<i>Avleha</i> made from <i>Kwath</i> and <i>Kalka</i> of <i>Trivrut</i> , <i>Sita</i> (sugar), <i>Madhu</i> , and <i>Trijata</i> is recommended for treatment. ⁷⁹
5.	The herbal medicine <i>Avleha</i> , made from a mixture of <i>Trivrut</i> , <i>Ajagandha</i> ,



	<i>Vanshlochana, Vidari, Sarkara, Madhu, and Ghrita</i> , is used to treat <i>Sannipata Jwara, Sthambha, Pipasa, and Daha</i> . ⁸⁰
6.	For <i>Pittaja</i> disorders, split <i>Ikshu Kanda</i> from the middle and paste <i>Trivrut Kalka</i> inside, then subject it to <i>Putpaka</i> processing, and administer it. ⁸¹
7.	A mixture of <i>Twaka, Ela, Neelani, Trivrut, and Sarkara</i> in specific proportions is to be administered with <i>Draksha Rasa</i> or <i>Madhu</i> or <i>Yava Saktu</i> or <i>Mantha</i> to treat <i>Tridoshaja Vikara, Mandagni, and delicate individuals</i> . ⁸²
8.	<i>Nishothadi Avleha</i> consisting of <i>Vidanga Tandula, Triphala, Yakakshara, Pippali, Trivrut, Ghrita, Madhu</i> , or made into <i>Modaka</i> with the help of <i>Guda</i> is used to treat <i>Gulma, Pleeodara, Kasa, Hallimaka, Arochaka, and other Kapha-Vata disorders</i> . ⁸³
9.	<i>Kalyanaka Guda</i> is a medicinal preparation made with a combination of various herbs and spices such as <i>Vidanga, Pippalimoola, Triphala, Dhanyaka, Chiktraka, Maricha, Indrayava, Ajaji, Pippali, Hastipippali, Lavan</i> of five types, and <i>Ajamoda Churna</i> . Each ingredient is added in a quantity of <i>Karsha</i> (12 grams), except for <i>Tila Taila</i> , which is added in a quantity of eight <i>Pala</i> (400 grams). <i>Trivrut Churna</i> is also added in a quantity of eight <i>Pala</i> . <i>Amlaki Rasa</i> is added in a quantity of three <i>Prastha</i> , and <i>Guda</i> is added in a quantity of half <i>Tula</i> (4800 grams). All the ingredients are heated on a mild flame, and pill ball-like <i>Udambara</i> is prepared. There are no restrictions on the usage of this formulation. <i>Kalyanaka Guda</i> is used to treat various ailments such as <i>Kustha, Arsha, Kamala, Gulma, Prameha, Udara, Bhangandhara, Ghrani, Pandu, and male infertility</i> . This formulation can be administered in any season. ⁸⁴
10.	<i>Gutika</i> is a mixture of <i>Avipattikara Yoga</i> , which includes <i>Trikatu, Trijata, Mushta, Vayvidanga, and Amlaki</i> in equal parts, along with <i>Trivrut</i> in five parts, <i>Shakara</i> in five parts, and <i>Madhu</i> . It is used to treat various disorders including <i>Mutrakrichya, Jwara, Vamana, Kasa, Shosha, Bhrama, Kshaya, Tapa, Panduroga, Mandagni, Visha Vikara, and Pittaja</i> . ⁸⁵
11.	In the rainy season, <i>Trivrut, Kutaja Beeja, Pippali, and Shunti</i> are given in equal parts along with <i>Madhu</i> and <i>Draksha Rasa</i> to induce <i>Virechana</i> . ⁸⁶
12.	In the <i>Sharada Ritu</i> season, <i>Trivrut, Durlabha, Musta, Sarkara, Udichaya, Chandana, Madhuyashati, and Saptala</i> are given in equal parts along with <i>Draksha Rasa</i> to induce <i>Virechana</i> . ⁸⁷
13.	In the winter season, <i>Trivrut, Chitraka, Patha, Ajaji, Sarala, Vacha, and Swarnaksheeri</i> are given in equal parts along with warm water to induce <i>Virechana</i> . ⁸⁸
14.	In the summer season, <i>Trivrut and Sarkara</i> are given in equal parts to induce <i>Virechana</i> . ⁸⁹
15.	<i>Trivrut, Trayamana, Saptala, Katurohini, and Swarnaksheeri</i> are given in equal parts and processed for three days in <i>Gomutra</i> . This formulation can be used to induce <i>Virechana</i> in all seasons in the <i>Snigdha Subject</i> . ⁹⁰
16.	<i>Trivrut, Shyama, Durlabha, Vatsaka, Hastipippali, Nilani, Triphala, Musta, and Katuka</i> are given in equal parts and administered in a dose of <i>Panitala Matra</i> . This mixture is given with <i>Ghrita, Mamsarasa, or warm water</i> to subjects with <i>Ruksha bodies</i> . ⁹¹
	<i>Shrangdhara</i> ⁹²



1.	<i>Virechana Yoga for Varsha Ritu: Trivrut, Kutaja Beeja, Pippali, and Shunti in equal parts are administered with Madhu and Draksha Rasa for Virechana in the rainy season</i>
2.	<i>Virechana Yoga for Sharada Ritu: Trivrut, Durlabha, Musta, Sarkara, Udichaya, Chandana, Madhuyashati, and Saptala in equal parts are administered with Draksha Rasa for Virechana in Sharada Ritu.</i>
3.	<i>Virechana Yoga for Hemanta Ritu: Trivrut, Chitraka, Patha, Ajaji, Sarala, Vacha, and Swarnaksheeri in equal parts are administered with warm water for Virechana in the winter season.</i>
4.	<i>Virechana Yoga for Grishma Ritu: Trivrut and Sarkara in equal parts are administered for Virechana in the summer season.</i>
5.	<i>Virechana Yoga for all Ritu: Trivrut, Trayamana, Saptala, Katurohini, and Swarnaksheeri, all in equal parts, are processed for three days in Gomutra. This formulation can be administered in all seasons in the Snigdha subject for Virechana,</i>

SAFETY & TOXICITY STUDIES

- The pilot study by Rais A. and Bhatted S. in 2013 aimed to determine the safety of *Virechana Karma*, a specific type of *Ayurvedic Panchakarma* treatment. *Trivrit (Operculina turpethum* Linn.) was used as one of the drugs for inducing *Virechana* in the patients. Serum electrolyte values remained within normal ranges in all 15 patients following the treatment. The study effectively demonstrated the safety of *Virechana karma*, both subjectively and statistically, without causing any adverse effects. This assessment was necessary to ensure the safe application of *Panchakarma* procedures in modern times.⁹³
- Kumar *et al.*, in 2006, conducted an experiment to assess the toxicity of ethanolic extract of *Operculina turpethum* Linn. The study involved administering the extract to various groups of rats in a dose-dependent manner. Following this, the animals were monitored for mortality. The researchers observed no changes in liver function markers such as serum glutamic oxaloacetic transaminase, serum glutamic pyruvic transaminase, serum bilirubin, and serum alkaline phosphatase after a specific period.⁹⁴
- In 2012, Sharma and Singh conducted an experiment to assess the acute oral toxicity of the methanolic extract of *Operculina turpethum* Linn. in mice. The LD50 value was determined to be 1917.66 mg/kg.⁹⁵
- In 2006, Bhande *et al.* conducted an acute toxicity study on healthy albino mice to assess the toxicity of *Acacia* and *Operculina turpethum* Linn. root suspension. The study involved dividing healthy male/female albino rats into eight groups, each containing six mice. *Acacia* suspension was orally administered at a dose of 0.5 mL in one group, while *Operculina turpethum* Linn. root suspension was administered at doses of 10, 30, 100, 200, 400, 600, and 800 mg/kg in the remaining groups. The animals were then observed at various time intervals over the course of a week. The findings indicated that the *Operculina turpethum* Linn. root suspension did not exhibit any toxic effects in any of the groups.⁹⁶



PHARMACOLOGICAL PROFILE

1. Antimicrobial Activity⁹⁷

In 2010, Alam et al. conducted a study to assess the antimicrobial properties of petroleum ether and ethanolic extracts of *Operculina turpethum* Linn. leaves. The study employed the standard disc diffusion method to evaluate the antimicrobial activity against Gram-positive bacteria like *Streptococcus hemolytic* and *Bacillus subtilis*, as well as Gram-negative bacteria including *Pseudomonas aeruginosa*, *Shigella sonnei*, and *Shigella dysentery*. The ethanolic extract demonstrated substantial inhibition zones against various human pathogenic organisms, with a minimum inhibitory concentration (MIC) ranging from 0.13–0.75 mg/mL, whereas the petroleum ether extract did not exhibit significant inhibition zones.

2. Antihepatotoxic Activity⁹⁸

In 2006, Kumar et al. conducted a study to estimate the hepatoprotective activity of *Operculina turpethum* Linn. in paracetamol-induced hepatopathy in rats, resulting in acute centrilobular necrosis. They administered the ethanolic extract of *Operculina turpethum* Linn. intraperitoneally at doses ranging from 100 to 2000 mg/kg body weight. The results demonstrated a significant dose-dependent hepatoprotective activity. Silymarin was used as a standard drug and exhibited a notable increase in hepatoprotective efficacy.

3. Antiulcer Activity⁹⁹

In a study conducted by Ignatius et al., the anti-ulcer effects of methanolic and hydroalcoholic extracts of the stem of *Operculina turpethum* Linn. were examined in male albino rats with aspirin and pyloric ligation-induced ulcers. The extracts were administered at a dosage of 100 mg/kg of body weight, and it was found that they exhibited significant antiulcer activity, with the hydroalcoholic extracts demonstrating superior results compared to the methanolic extracts. Ranitidine served as the standard drug in the study.

4. Anti-inflammatory Activity¹⁰⁰

In 2006, Rajashekar et al. conducted a study on the anti-inflammatory potential of *Operculina turpethum* Linn. root powder in formalin-induced edema in rats. They administered the root powder and its Ayurvedic polyherbal formulation (Avipattikar Churna) orally to rats at a dose of 100 mg/kg body weight. The results demonstrated a significant reduction in formalin-induced edema volume, with reductions of 36.45% and 27.11% for the root powder and Avipattikar Churna, respectively.

5. Anti-Arthritic Activity¹⁰¹

In 2013, Sharma and Singh conducted a study using in vitro models to assess the anti-arthritic activity of ethanolic root extracts of *Operculina turpethum* Linn. by examining their inhibition of protein denaturation. The study involved testing the ethanolic root extracts at various concentrations with bovine serum albumin to gauge their potency. Acetylsalicylic acid served as the standard reference, and the results showed a significant inhibition of 70% with acetylsalicylic acid and 67.22% with the ethanolic extract.

6. Antidiabetic Activity¹⁰²



Pulipaka et al. conducted a comparative study to evaluate the antidiabetic effects of MEOTS (methanolic extract of *Operculina turpethum* Linn. stem) and MEOTR (methanolic extract of *Operculina turpethum* Linn. root) in experimental rat models with streptozotocin-induced diabetes. The study administered a dose of 100 mg/kg of body weight and used glibenclamide as the standard drug. The results showed that the methanol extracts led to a significant reduction in fasting glucose levels after 21 days.

DISCUSSION

Virechana is considered the most effective treatment for *Pitta Dosha*, *Pitta Sthanagata Kapha*, and *Kapha Sansrista Doshas*. *Aamashaya*, the particular seat of the *Pitta* and *Kapha Doshas*, makes *Virechana Karma* favorable to cure both *Pitta* and *Kapha Dosha*.¹⁰³ *Virechana* can also treat *Vata Dosha* and *Vatika* diseases, therefore used to balance out the three *Doshas*.

The text mentions season-wise *Virechana* preparations of *Trivrut*, along with different drug combinations.⁹² These combinations utilize various dosage forms like *Churna*, *Avaleha*, *Gutika*, *Kwatha*, etc. *Trivrut* can be used to pacify *Vata* and *Pitta Dosha* using different *Anupana*. The text recommends using *Trivrut* with *Sura*, *Sauviraka*, *Madhya*, *Godughdha*, *Ghruta*, etc. It is said that *Trivrut* has *Sarvarogahara* properties.²

The initial chapter of *Nirdesha Chatushka* referred to as *Khuddakachatushpada*, addresses four aspects of therapeutics that apply to both healthy individuals and those afflicted with ailments.¹⁰⁴ These four aspects are a physician (*Bhishaga*), medicine (*Dravya*), attendant (*Upastatha*), and patient (*Rogi*).¹⁰⁵ In this same chapter, *Acharya Charka* elaborates on the qualities an ideal *Ayurvedic* medicine should possess. The four qualities that a medicament should have, as explained by *Acharya Charka*, *Bahuta*, *Yojnyatva*, *Anekavidha Kalpana* and *Sampath*.¹⁰⁶ The *Charaka Samhita* states that ideal medicine in *Ayurveda* should possess easily accessible attributes. It should be effective, capable of being formulated in multiple ways, and have natural qualities containing bioactive ingredients.

Abundance is one of the important characteristics of an ideal *Ayurvedic* medicine. Although the medicine may be extremely effective for a particular ailment or individual, if it is not readily available, it is essentially useless. This characteristic is very practical when it comes to treatment. In the stage of illness, medicine must be immediately accessible. Additionally, medicine needs to be available in large quantities to ensure consistency in the treatment process. If the medicine is only available in small quantities, it may lead to inconsistent processes, making abundance a crucial characteristic. However, this abundance should arise naturally rather than being artificially created. *Trivrut* is found throughout tropical dry and moist deciduous regions in central and peninsular India.¹⁰⁷ *Trivrut* is native to tropical climates. It is widely distributed throughout India, up to an altitude of 1000 meters, and sometimes cultivated. It is very well found in abundance in the Indian Subcontinent and fulfills the criteria of abundance nationwide.¹⁰⁸

Trivrut as an ingredient was observed in 765 formulations after the compilation of *Trivrut* from 18 different books.² *Trivrut*-containing formulations are utilized in 107 different disease conditions. The highest number of formulations is used for *Jvara* (fever) with 57 formulations, followed by *Kushtha* (skin diseases) with 55, *Udara Roga* (abdominal diseases) with 50, *Gulma* (a type of lump) with 47, and *Shotha* (inflammation) with 32. *Vatarakta* (gout) has 26 formulations, while *Udavarta* (upward movement of *vāyu* with retention of



stool and urine), *Arsha* (piles), *Vrana* (wound), and *Bhagandara* (fistula-in-ano) each have 21 formulations. Other conditions with notable formulation usage include *Amavata* (rheumatoid arthritis) with 19, *Grahani Dosha* (disorders of lower G.I.T) with 18, *Shula* (colic), and *Vatavyadhi* (disorders due to Vata) with 16 formulations each.² Additionally, 38 formulations were found to be commonly referenced by more than five authors, indicating their significance. External application was observed for 88 formulations, while 25 formulations were designated for both internal and external use. The collected formulations encompass 23 different types, with *Churna* (powder) leading with 165 formulations, followed by *Kwatha* (decoction) with 94, *Ghruta* (medicated ghee) with 91, *Rasakalpa* (herbal formulations) with 85, and *Taila* (oil) with 60. Other formulations such as *Gutika Avaleha* (confectionery pills) with 42, *Vati* (tablet) with 41, *Lepa* (ointment) with 35, and *Modaka* with 23 formulations also have a notable presence.²

Certain patients may have preferences for different forms of medication administration, such as *Choorna* (powder) or *Kwatha* (decoction) etc., and specific diseases may require medication to be administered in a particular form. In *Kalpa Sthana*, six hundred formulations were mentioned, which are combinations that have been practically experienced and used. The *Vaidhya*, with his intellect and experience, can plan and prepare such combinations of thousands of crores. There is a vast scope for multidrug combinations, and new formulations can be created without any limits. Out of the 600 formulations, 245 are specified for *Virechana*. *Kalpa Sthana* provides detailed descriptions of *Shyama Trivrt* (110), *Chaturangula* (12), *Tilvaka* (16), *Sudha* (20), *Saptala-Sankhini* (39), and *Danti Dravanti* (48).¹⁰⁹

The term '*Sampan*', derived from Sanskrit, refers to prosperity. In *Ayurvedic* practices, it denotes an herb or medicine abundant in its natural bioactive components. Such a herb possesses numerous medicinal properties and is capable of treating ailments effectively. To draw a comparison, we can liken this well-endowed herb to a soldier who can fight in any situation but is most efficient with the right weaponry and equipment. In the same vein, a sampan herb contains medicinal juices that can aid in curing diseases. The purpose of composing *Kalpa Sthana* in *Charaka Samhita* is to provide a detailed description of the recipes for *Vamana* and *Virechana* and how they can be used to treat various diseases.¹¹⁰ The following objectives were kept in mind while describing *Kalpa Sthana*:

- To prepare recipes for *Vamana* and *Virechana*, using the main drugs along with subsidiary ones like *Sura* (alcohol), *Sauvira* (vinegar), and *Kovidara*, which are most useful for facilitating *Vamana* and *Virechana Karma*. The varieties and proportions of these drugs were also mentioned.
- To prepare these recipes appropriately using different pharmaceutical processes (*Kriya-Vidhi*) that facilitate easy action (*Sukhopaya*).

Acharya Sushruta states about the quality of drug used for *Narapati* (royals) as *Sukhama* (Comfortable), *Drishta Phalama* (have known action), *Hridya* (palatable), *Alpa Matrama* (dosage should be small), *Mahagunama* (highly potential) and *Vyapata Swalpa* (least complication producing).¹¹¹ *Trivrut* has been found as an ideal option for *Virechana Karma* in *Narapati*, as it possesses all the qualities outlined by *Acharya Sushruta*. Its effectiveness in facilitating *Virechana Karma* and *Bahu Dosha* elimination from the body is well established, making it a highly suitable choice for this particular treatment. As per the *Kashyap Samhita*,



an ideal drug for this process should have characteristics like *Yadaasakatam* (Dravya should be such that it expels Dosha promptly), *Maha Vegama* (should remove Dosha easily), *Sukhenashu* (should remove Dosha forcefully), *Anabadhakarama* (it should not produce any complications), *Natiglanpanama* (does not cause repentance), *Avyapanna Gunoudaka* (have proper potency).¹¹² *Trivrut* is found to have all those characteristics to be a drug of choice for *Virechana Karma*.

Trivrut has *Madhura*, *Tikta*, and *Katu*, rasa as well as *Ruksha*, *Ushna* and *Tikshna Guna*, and *Katu Vipaka*.⁷ *Madhura Tikta* and *Kashaya Rasas* of *Trivrut* are properties that help balance Pitta dosha. The *Katu*, *Tikta*, and *Kashaya Rasas* of *Trivrut* help balance *Kapha Dosha*.⁷ As a gentle laxative, *Trivrut* mainly helps regulate *Vata* dosha and has a simultaneous effect of balancing *Kapha* and *Pitta* doshas. The Pharmacodynamic Properties, Classification and Chemical Constituents, and Pharmacological Actions of *Trivrut* elaborates on the medicine abundant of *Sampanta* among other *Virechana Dravyas*. As per *Shrangdhara Samhita* *Trivrut* is mentioned best as *Rechaka* in *Virechana Classification*.¹¹³ *Acharya Sushruta* also describes *Trivrut Moola* as the best *Virechana Dravya*.¹¹⁴ It also has the potency to effectively remove *Bahu Doshas* to a greater extent without causing discomfort and complications. *Trivruta's Samyog* and *Sanskara* properties make it possible to prepare many preparations or *Kalpna*s with it. *Trivruta's Ayurvedic* properties enable it to commence *Sukhavirechana* without any complications even in *Sukumara's* person.

CONCLUSION

Trivrut is a highly recommended drug that has proven to be a milestone in the commencement of *Virechan Karma*. Classical literature ascribes various functions to the plant, and thorough clinical trials and experimental models have substantiated its diverse range of actions. *Trivrut* is included in *Virechana Dravyas* and is considered *Shrestha* among all the *Acharyas* due to its variety of formulations and its use for various disease purposes. It also fulfills the ideal characteristics of medicine as per *Acharya Charaka* and also fits in the criteria of ideal characteristics of *Shodhana Drugs*. *Trivrut* is a remarkably effective medication that is considered the top choice for *Virechana Karma*. *Trivrut* is present in *Bahuta (abundance)* and can be safely administered to patients of all types during any season. Its many formulations (*Anekavidha Kalpana*) and *Sampanta* (rich in its Indigenous bioactive constituents), as well as its *Maha Vegama* (should expel *Dosha* promptly) and *Bahudoshaharama Sukhama* (effective removal of *Dosha* in a greater extent with ease) properties, make it a versatile medication for treating a wide range of ailments and performing *Sukha Virechana* (effortless purgation). In summary, *Trivrut* is indeed a *Shrestha* Drug and can be considered as a drug of choice for *Virechana Karma*. Additional research studies are necessary to investigate the comparative effectiveness of various *Virechana Dravyas* in order to substantiate the assertion.

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