



THERAPEUTIC INSIGHTS OF *Panchaangula Prayoga* IN *Panchakarma*: A COMPREHENSIVE REVIEW ON THE MULTIDIMENSIONAL APPLICATIONS OF *RICINUS COMMUNIS LINN.* IN *Panchakarma*

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ABSTRACT

Background: *Eranda* (*Ricinus communis* Linn., family *Euphorbiaceae*), the castor oil plant, is known in *Ayurveda* as *Vatari*, the enemy of *Vata*. Its root, leaf, seed, seed oil and ash are described in the *Brihatrayi*, *Laghutrayi* and later compendia as both *Shamana* and *Shodhana* agents. Although *Eranda* is cited repeatedly across *Panchakarma*, the references are scattered and no procedure-wise compilation with a pharmacodynamic rationale is available.

Aim

- To compile and systematically classify the classical references pertaining to the therapeutic use of *Eranda* across the various procedures of *Panchakarma*.
- To correlate the pharmacodynamic properties of *Eranda* with its wide-ranging clinical applications.

Materials and Methods: This is a compilatory and review article. *Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya*, *Ashtanga Sangraha*, *Chakradatta*, *Bhaishajya Ratnavali*, *Bhavaprakasha*, *Yogaratanakara*, *Sharangadhara Samhita*, *Sahasrayogam*, *Basavarajeeyam* and other compendia were screened for key words like *Eranda*, *Panchangula*, *Gandharvohasta*, *Vatari* and *Chitra* references. Contemporary literature on the phytochemistry, pharmacology and toxicology of *Ricinus communis* was consulted to support the discussion. The collected material has been organized procedure-wise under the conventional *Panchakarma* frame work for ease of clinical reference.

Observation and discussion: *Eranda* is used in *Deepana-Pachana*, *Snehana*, *Swedana*, *Virechana*, *Basti*, *Nasya*. Its *Madhura-Katu-Kashaya Rasa*, *Guru-Snigdha-Tikshna Guna*, *Ushna Virya* and *Madhura Vipaka* allow it to pacify *Vata* by *Snigdha Guna* while clearing the *Srotas* by *Tikshna Guna*. The pairing of *Snigdha* and *Tikshna* qualities explains its use in many diseases especially in *Vata Vyadhi*.

Conclusion: *Eranda* is one of the most versatile single drugs explained in *Ayurvedic* classics, because of its *Vatahara* properties it is used in almost all type of treatments procedure both internal and external.

KEYWORDS: *Eranda*, *Ricinus communis*, *Panchaangula*, *Panchakarma*, *Deepana-Pachana*, *Swedana*, *Nasya*, *Virechana*, *Basti*.

INTRODUCTION

Ayurvedic Materia medica draws on substances of plant, animal and mineral origin, but plant drugs (*Audbhida Dravya*) are the most widely used because of their availability, safety margin and the volume of textual documentation behind them. Among them, *Eranda* (*Ricinus communis* Linn., *Euphorbiaceae*), commonly called the castor oil plant, holds a special place. It is described in the *Brihatrayi* and also in later works such as the *Chakradatta*, *Bhaishajya Ratnavali*, *Bhavaprakasha Samhita*, *Yogaratanakara*, *Sharangadhara Samhita*, *Rasaratna Samuchchayah*, *Vangasena Samhita*, *Bharata Bhaishajya Ratnakara* and *Basavarajeeyam* etc.

Because of its unmatched ability to pacify *Vata Dosha*, the drug is called *Vatari*. Another synonym, *Panchaangula*, refers to the palmately lobed leaf, which resembles a hand with five fingers; it is this synonym that the present title borrows to denote the "five-fold" use of the plant across its parts and procedures. Every part of the plant, namely root (*Moola*), leaf (*Patra*), seed (*Beeja*) and expressed oil (*Taila*), is credited with distinct pharmacodynamic attributes and therapeutic uses, which makes *Eranda* indispensable in both *Shamana* and *Shodhana chikitsa*.

Panchakarma is the principal bio-purificatory therapy of *Ayurveda*. Its preparatory (*Purvakarma*), principal



(*Pradhanakarma*) and post-procedural (*Paschatkarma*) stages require drugs that can digest *Ama*, do *Rukshana* as needed, induce *Sweda*, eliminate vitiated *Doshas* and then restore *Agnibala*. Classical authors mentioned and used *Eranda* in *Panchana* – *Deepana*, *Snehana*, *Swedana*, *Basti*, *Nasya*, *Dhumapana* treatments.

Despite its wide use, the information is scattered across many texts and is rarely discussed with a rationale. This review therefore collates the information procedure-wise and understanding its use.

AIM AND OBJECTIVES

Aim

To compile and critically discuss the use of *Eranda* (*Ricinus communis* Linn.) in the various procedures of *Panchakarma*.

Objectives

- To compile and classify the classical references on the therapeutic use of *Eranda* across *Panchakarma* procedures.
- To correlate the *Rasapanchaka* of *Eranda* with its clinical applications.
- To discuss the role of *Eranda* in *Deepana-Pachana*, *Snehana*, *Swedana*, *Virechana*, *Basti*, *Nasya* and *Dhumapana*.
- To relate the classical uses to contemporary phytochemical and pharmacological knowledge and to the safety profile of the drug.
- To provide a ready clinical and academic reference for the rational use of *Eranda* in *Panchakarma* practice.

REVIEW OF THE DRUG

Botanical and taxonomic profile^[1]

Category	Details
Botanical name	<i>Ricinus communis</i> Linn.
Family	Euphorbiaceae
Sanskrit synonyms	<i>Vatari</i> , <i>Panchaangula</i> , <i>Urubuka</i> , <i>Chitra</i> , <i>Gandharvahasta</i> etc.
Vernacular / English names	English: Castor Hindi: Arandi Kannada: Haralu Malayalam: Avanakku; Tamil: Amanakku Telugu: Amudamu
Varieties	<i>Shweta</i> and <i>Rakta Eranda</i>
Parts used	Root, leaf, seed, seed oil, <i>kshara</i> of leaf / seed

Rasapanchaka of *Eranda*^[2]

Attribute	Description
<i>Rasa</i>	<i>Madhura</i> , <i>Katu</i> , <i>Kashaya</i>
<i>Guna</i>	<i>Guru</i> , <i>Sniigdha</i> , <i>Tikshna</i> .
<i>Virya</i>	<i>Ushna</i>
<i>Vipaka</i>	<i>Madhura</i>
<i>Doshakarma</i>	<i>Kapha-Vata Shamaka</i>

Classical categorisation (*Gana*)^[3]

Acharya	<i>Gana</i> (classical group)
<i>Charaka</i>	<i>Bhedaniya</i> , <i>Angamarda-Prashamana</i> , <i>Swedopaga Mahakashaya</i>
<i>Sushruta</i>	<i>Vidariqandhadi Gana</i>
<i>Vagbhata</i>	<i>Vidariqandhadi Gana</i>

Observations: Therapeutic applications of *Eranda* in *Panchakarma*

Charaka describes *Eranda Taila* as a drug of choice in *Gulma*, *Udara Roga*, *Brudhna*, *Arsha*, *Pliha Roga*, *Udavarta*,

Yonivyapad, *Shukra Dosh*, *Medoroga*, *Kaphavrita Gambhira Vatarakta*, *Gridhrasi* and *Pakshavada*, which shows its wide therapeutic latitude.^[4]



Eranda in Deepana-Pachana

Sl no.	Formulation	Indication	Part used	Reference
1.	Gandharvahastadi Kashaya	Pachana	Root	SY (Taila Prakarana)
2.	Erandadi Kwatha	Pachana, Amavata	Root	BR 29/21
3.	Rasnapanchaka Kashaya	Pachana; Sama sandhi-asthi-majjagata vata	Root	BR 29/24
4.	Eranda Rasa with Shunthi	Deepana-Pachana; Atisara, Shoolagna	Root	CD (Atisara Chikitsa/31)
5.	Eranda Patra kshara / Vaishvanara kshara	Deepana-Pachana	Leaves	BP (Chi 6/53-60)
6.	Eranda Taila with Haritaki churna or Shunthi in Amavata	Anulomana, Ama-Pachana, Shoolahara	Oil	BR (Chi 26/51; 29/50)

Eranda in Shamananga Sneha

Sl no	Formulation	Indication	Part used	Route	Reference
1.	Eranda Taila with Varuni Manda	Vataja-Kaphaja Gulma	Oil	I	Cha Chi 5/92-93
2.	Eranda Taila with Ksheera	Vata-Pittaja Gulma	Oil	I	Cha Chi 5/94-95
3.	Taila Panchaka (includes Eranda Taila)	Gulma	Oil	I	Cha Chi 5/ 96
4.	Dashamooladi Kashaya with Eranda Taila	Gridhrasi, Khanja, Pangu	Oil	I	CD - 22/42
5.	Eranda Taila with Gomutra	Gridhrasi and Urugraha	Oil	I	CD - 22/46
6.	Eranda Taila with Gomutra and Pippali	Vata-Kaphaja Gridhrasi	Oil	I	CD - 22/47
7.	Eranda Taila	Vatakantaka	Oil	I	CD - 22/66
8.	Eranda Taila with Haritaki Churna	Amavata	Oil	I	B R Chi 26/51
9.	Eranda Taila with Shunti	Amavata	Oil	I	B R Chi 29/50
10.	Eranda Taila	Amavata	Oil	I	RRS 21/53
11.	Eranda Taila with Kwatha of Vasa, Guduchi, Aragwadha	Vatarakta	Oil	I	B R Chi 29/36
12.	Eranda Taila with Guduchi	Vatarakta	Oil	I	B R Chi 29/49
13.	Eranda Taila alone or with milk	Vatarakta	Oil	I	YR- 34/6
14.	Chaturangula, Vrusha, Amrutalata with Eranda Taila	Vatarakta	Oil	I	YR- 34/14
15.	Pinda Taila (contains Eranda Taila)	Vatarakta	Oil	E	AH Chi 22/22 V S (Vatarakta /97)
16.	Eranda Taila-Bhrushta Haritaki	Udarashoola and Vishtambha	Oil	I	YR - 8/44
17.	Eranda Taila with Kwatha of Shunthi, Hingu, Ruchaka	Udarashoola	Oil	I	YR - 15/15
18.	Eranda Taila -Bhrushta Haritaki	Vruddhi Roga (hernia)	Oil	I	YR - 15/14
19.	Rasnadi Kashaya with Eranda Taila	Shlipada, Vruddhi, Khuda, Admana, Ardita, Asthila	Oil	I	YR - 33/5-6
20.	Taila Paka of Snuhi Ksheera, Eranda, Shweta Palandu, Markava	Vata Roga	Oil	I	BSJ - 6/329
21.	Triphala Yamaka (Triphala + Eranda taila + Chitraka + Go-ghrita + Vatsanabha + Gomutra)	Vata Roga	Oil	E	RSS - 21/158
22.	Triphaladi Taila	Shiroroga, Khalitya, Palitya, Urdhvajatrugata Roga	Root	E	SY (Taila Prakarana)
23.	Prabhanjana Vimardana Taila	Vataja Gulma, Antra Vruddhi, Vata Vyadhi	Root	E	SY (Taila Prakarana)
24.	Mahamasha Taila	Ardita, Bahudosha, Avabahuka, Kubja Roga	Root	I and E	B R (Vatavyadhi Chikitsa 241-245)



25.	<i>Bruhat Saindhavadi Taila</i>	<i>Amavata, Sandhigata Vata, Prustha Shoola, Parshva Shoola.</i>	Oil	I and E	B R (<i>Vatavyadhi Chikitsa</i> 241-245)
26.	<i>Hingutriguna Taila</i>	<i>Gulma, Udara, Vardhma, Shoola.</i>	Oil	I	AH Chi 14/39
27.	<i>Mahavishagarbha Taila</i>	<i>Vataroga</i>	Root	E	B R (<i>Vatavyadhi Chikitsa</i> 414-423)
28.	<i>Amruthadi Taila</i>	<i>Vatavyadhi</i>	Root	I and E	Cha chi 28/158-64
29.	<i>Baladi Taila</i>	<i>Vatavyadhi</i>	Root	I and E	Cha chi 28/149-156
30.	<i>Dashanga Taila</i>	<i>Vatavyadhi</i>	Oil	E	GN
31.	<i>Dvipanchamuli Taila</i>	<i>Vidradhi</i>	Oil	I	V S
32.	<i>Gandhahastiprasarini Taila</i>	<i>Vatavyadhi</i>	Root	I and E	V S (<i>Vatavyadhi</i> / 457-477)
33.	<i>Amruthavya Taila</i>	<i>Vatarakta</i>	Root	E	V S (<i>Vatarakta</i> / 103-109)
34.	<i>Ikshuwaku Taila</i>	<i>Kushtha</i>	Root	E	Cha Chi 6/108-110
35.	<i>Kanakaksheeri Taila</i>	<i>Kushtha</i>	Root	E	Cha Chi 6/111-116
36.	<i>Narayana Taila</i>	<i>Vatavyadhi</i>	Root	I and E	CD (<i>Vatavyadhi</i> / 121-131)
37.	<i>Vishnu Taila</i>	<i>Vatavyadhi</i>	Root	I and E	CD (<i>Vatavyadhi</i> / 113-120)
38.	<i>Eranda Tailadi Yoga</i>	<i>Jwara due to Khuranda</i>	Oil	E	BBR – 570
39.	<i>Erandadi Taila</i>	<i>Visarpa</i>	Oil	E	BBR - 571

I – Internal Administration, E – External Application

Role of Eranda in Shodhananga Snehapana

Several medicated Ghrita in which Eranda is an ingredient are used for Snehapana in the Purvakarma of Shodhana, and are also listed for specific diseases:

Sl no.	Formulation	Indication	Part used	Reference
1.	<i>Amruthadi Ghrita</i>	<i>Vatarakta</i>	Root	BNR
2.	<i>Bhallataka Ghrita</i>	<i>Gulma</i>	Root	A H
3.	<i>Jeevaniya Ghrita</i>	<i>Vatarakta, Vandyatva</i>	Root	Cha chi 28/61-70
4.	<i>Mahachaitasa Ghrita</i>	<i>Apasmara</i>	Root	C D (<i>Apasmara</i> / 23-28)
5.	<i>Rasnadyam Ghrita - Taila</i>	<i>Shula</i>	Root	R R
6.	<i>Sukumara Ghrita</i>	<i>Vruddhi, yoni roga, vidradhi, gulma, arsha</i>	Oil, Root	S Y (<i>Ghritha Prakarana</i>)
7.	<i>Trikantakadya Ghrita</i>	<i>Mutrakruchhra</i>	Root	B P
8.	<i>Tilwak Ghrita</i>	<i>Vata Vyadhi</i>	Root	Vangasena (<i>Vatavyadhi</i> / 191-192)
9.	<i>Tilwakadyam Ghrita</i>	<i>Kushta, Krimi</i>	Root	BBR-2



Eranda in Swedana

Sl no.	Method / formulation	Indication	Reference
1.	Swedana with <i>Eranda Kashaya</i>	<i>Kaphaja Gulma</i>	Cha Chi 5/141
2.	<i>Pariseka Sweda</i> with <i>Eranda Patra Kwatha</i>	<i>Arshas</i>	Cha Chi 14/44
3.	Sweda with seeds of <i>Eranda</i> , <i>Vrushchika</i> , <i>Yava</i> , <i>Atasi</i> , <i>Karpooora</i> , <i>Avantisoma</i>	<i>Athichala</i>	YR - 33/2
4.	<i>Nadi Sweda</i> with <i>Eranda</i> and other drugs (<i>Bilwa</i> , <i>Arkamoola</i> , <i>Punarnava</i> , <i>Dhatuira</i> , <i>Shigru</i> , <i>Ajagandha</i> , <i>Ashwagandha</i> , <i>Tarkari</i> , <i>Yava</i> , <i>Renuka</i> , <i>Aranala</i>)	<i>Karnaroga</i>	BBR – vol 3/4589
5.	<i>Sankara Sweda</i> with <i>Karpasa</i> , <i>Eranda</i> , <i>Kulattha</i> , <i>Tila</i> , <i>Yava</i> , <i>Atasi</i>	Pain in <i>Sphik</i> , <i>Pani</i> , <i>Pada</i> , <i>Anguli</i> , <i>Gulpha</i> , <i>Sandhi</i> , <i>Kati</i>	B R - 29/9
6.	<i>Patrapinda Sweda</i> with <i>Eranda Patra</i> and other <i>Vatahara</i> leaves in <i>Eranda Taila</i> / <i>Tila Taila</i>	<i>Vata-Kapha</i> dominant painful and stiff conditions (<i>Sandhivata</i> , <i>Amavata</i> after <i>Ama-Pachana</i> , <i>Katishula</i> , <i>Gridhrasi</i>)	Dhara Kalpa
7.	<i>Upanaha</i> with <i>Eranda Patra</i> / <i>Beeja</i> / <i>Moola Kalka</i> , <i>Eranda Taila</i> , <i>Saindhava</i> and <i>Amla Dravya</i>	<i>Vata-kapha</i> dominant painful swellings and stiffness	Dhara Kalpa

Eranda in Virechana

Sl no.	Formulation	Indication	Reference
1.	<i>Eranda Taila</i>	<i>Udara Roga</i> (in <i>Avritta</i> / obstructed conditions)	Cha Chi 13/172
2.	<i>Eranda Taila</i>	<i>Virechana</i> when <i>Niruha Basti</i> is retained / obstructed	Cha Chi 15/79
3.	<i>Sindhuvara Eranda Taila</i>	<i>Vata Roga</i>	SY (Taila <i>Prakarana</i>)
4.	<i>Nimbamritadi Eranda Taila</i>	<i>Kushta</i> , <i>Arbuda</i> , <i>Nadivruna</i> , <i>Gandamala</i> , <i>Gulma</i>	AH Chi 21/58–61
5.	<i>Gandharvahasta Taila</i>	<i>Vata Vyadhi</i>	AS Chi 15/21
6.	<i>Eranda Taila</i> with <i>Triphala Kwatha</i> , or with <i>Ghritha</i> / <i>Taila</i> , or with <i>Vasa</i> and <i>Shunthi kwatha</i>	<i>Vata Vyadhi</i> , <i>Arsha</i>	GN

Eranda in Basti

Sl no.	Basti formulation	Indication	Part used	Reference
1.	<i>Erandamooladi Niruha Basti</i>	<i>Vata Vyadhi</i>	Root	Cha Si 3/38–42
2.	<i>Erandamooladi Yapana Basti</i>	<i>Vatavyadhi</i>	Root	Cha Si 12/15
3.	<i>Madhutailika Basti</i>	<i>Medoroga</i> , <i>Gulma</i> , <i>Krimi</i> , <i>Pliha</i> , <i>Udavarta</i>	Root	SS (Ut Kha 6/29–30)
4.	<i>Utkleshaka Basti</i>	For <i>Doshoutkleshana</i>	Root	SS, Ut Kha 6/17
5.	<i>Utkleshaka Basti</i>	For <i>Doshoutkleshana</i>	Seed	SuSm Chi 38/93
6.	<i>Yuktathara Basti</i>	<i>Vata-kapha</i> disorders	Root	SS (Ut Kha 6/32)
7.	<i>Shampakadi Asthapana Basti</i>	<i>Vatavyadhi</i>	Root	SuSm Chi 38/43-46
8.	<i>Vrushadi Asthapana Basti</i>	<i>Vatavyadhi</i>	Root	SuSm Chi 38/67-70
9.	<i>Chitrakadi Taila</i>	<i>Vatavyadhi</i>	Root	SuSm Chi 37/15-18
10.	<i>Bhuthikadi Taila</i>	<i>Vatavyadhi</i>	Root	SuSm Chi 37/19-26
11.	<i>Triphaladi Taila</i>	<i>Sthoulya</i> , <i>Kandu</i>	Oil	SuSm Chi 37/33-35
12.	<i>Pathadi Taila</i>	<i>Kapha Roga</i>	Oil	SuSm Chi 37/36-38
13.	<i>Vidangadi Taila</i>	<i>Udavartha</i> , <i>Vatarakta</i>	Oil	SuSm Chi 37/39-42



Eranda in Nasya

Sl no.	Formulation	Indication	Part used	Reference
1.	Erandadi Nasya: Shweta Eranda, Jatamamsi, Kantakari, Devadaru, Vacha, Tagara	Urdhwajatrugata Vata-Kaphaja Roga	Root	BBR 1/1972
2.	Shadbindu Taila	Shiroroga	Root	B R (Shiroroga Adhikara 49-51)
3.	Erandadi Taila	Badirya	Leaves	AH Ut 18/23-24

Eranda in Dhumapana

Sl no	Formulation	Indication	Part used	Reference
1.	Haridra, Erandamoola, Laksha, Manashila, Devadaru, Haratala with Jatamamsi.	Hikka and Shwasa	Root	Cha Chi - 17/77 YR - 6/2
2.	Eranda with Dhatura, Vyosha, Manashila	Kasa	Root	BBR - 2/9170
3.	Mashadi Nasya contains Eranda	vatavyadhi	Root	VS (Vatavyadhi /211)

Eranda in Lepa Chikitsa

Sl no	Yoga	Indication	Reference
1.	Madhuchistadi Lepa	Sandhigata Vata, Vataraktha, Sandhichyuti, Bhagna	Cha chi 29/141-144
2.	Uma + Eranda beeja + milk	Vataraktha	YC 34
3.	Chitrakadi lepa Eranda beeja is used	Kushta	BBR 3
4.	Chakramardadi Lepa Eranda Taila is used	Dadru kusta	RSS
5.	Dantyadi lepa Eranda Beeja is used	Kushta	RchuM.
6.	Karanja Beejadi Lepa contains Eranda Beeja	Visphotaka	GN
7.	Gandhakadi Lepa	Galaganda	YR (Gandamala -Apachi chikitsa)
8.	Harenwadi Lepa contains Eranda Taila	Shiroruja or Shirovedana	BBR
9.	Bahallatakadi Lepa (Contains Eranda).	Shiroroga	BBR – vol 3
10.	Erandadi Lepa	Visha Roga	BBR – vol 1
11.	Erandamooladi Pralepa	Nakha and Dantha Visha	BBR – vol 1 - 9165
12.	Erandadi Lepa	Shotha	GN
13.	Pralepa with Eranda + Madhuka + Draksha + Ashwagandha + Punarnava + Mulka	Vataja Shotha	BBR- 1, 9166
14.	Majuphaladi Lepa contains Eranda Taila	Palitya	YR
15.	Eranda + Shirgu + Sephalika + Yava + Godhuma + Mudga	Vidradi	SS utt kh 3/93
16.	Eranda + Dhatura + Nirgundi + Varshabu + Shigru + Sarshapa	Shlipada	SS ut kh 3/103
17.	Eranda + Ajaji + Hapusha + Kustha + Badara + Sarshapa	Kuranda	SS ut kh 3/104

CS – Charakasamhita, Su.Sm. – Sushrutasamhita, AH – Ashtangahrudaya, HS – Haritasamhita, SS – Sharngadharasamhita, BP – Bhavaprakasha, CD – Chakradatta, VS – Vangasena, GN – Gadanigraha, VM – Vrundamadhava, YR – Yogaratnakara, RRSm – Rasaratnasamuchchaya, BR – Bhaishajyaratnavali, RR – Rasaratnakara, BBR – Bharatbhaishajyaratnakara, BNR – Bruhannighanturatnakara, RCM - Rasachintamani RchuM – Rasendrachudamani, B P S – Bhavapraksha Samhita. Basavarajeeyam -BSJ.



DISCUSSION

The classical literature shows that *Eranda* is not confined to a single therapeutic role but runs through almost every stage of *Panchakarma*. This versatility follows from its *Rasapanchaka*. The presence of *Snigdha* and *Tikshna Guna* together with *Ushna Virya* and *Madhura Vipaka* lets the drug to produce *Snigdha* and pacify *Vata* in low doses (as in *Snehana* and *Shamana Yogas*) and exert a penetrating, *Srotoshodhaka* effect in higher doses or with suitable *Anupana* (as in *Virechana* and *Basti*).

Role of *Eranda* in *Deepana-Pachana*: *Agni* and *Ama* are the central considerations of the *Purvakarma*. *Shodhana* given on an *ama* condition is unsafe and ineffective, and *Snehapana* given in *ama* give rise to further obstruction. *Eranda* having *Katu rasa* and *Ushna Virya* increases *Jataragni*, digest *Ama*, *Tikshna Guna* does *Srotoshodhana*. *Eranda Taila* if used along with other *Deepana* and *Pachana* drug helps *Vatanulomana* which helps in proper functioning of *Agni*.

Role of *Eranda Taila* in *Snehana*: *Eranda Taila* derived from the seeds of *Ricinus communis* Linn., is an important medicated and therapeutic oil used in *Ayurvedic* practice. Its traditional properties, particularly *Ushna Virya*, *Tikshna Guna* provide an *Ayurvedic* rationale for its use in *Snehana Karma* in conditions involving *Vata Dosha*, associated with *Kapha* or *Ama*. *Eranda Taila* is also used as an ingredient in various *Taila* and *Ghrta* formulations. In certain traditional *Kuzhambu* preparations, it is combined with *Tila Taila* to support the desired therapeutic effects.

The pharmacological potential of *Ricinus communis* has also been investigated in experimental studies. In one study, castor seed oil was evaluated for its antiulcer activity at doses of 500 and 1,000 mg/kg using ethanol-induced, aspirin-induced, and pylorus ligation-induced gastric ulcer models. The results indicated greater antiulcer activity at the dose of 1,000 mg/kg compared with 500 mg/kg. The observed effects were attributed to its potential cytoprotective activity and enhancement of gastric mucosal defence mechanisms. These findings suggest that *Ricinus communis* may possess gastroprotective properties under experimental conditions.^[5]

Role of *Eranda* in *Swedana*: *Eranda* has potential therapeutic relevance in *Swedana Karma* owing to its traditional properties and its application in *Vata*-dominant disorders. *Charaka* includes *Eranda* in *Swedopaga Mahakashaya* and *Angamarda Prashamana Mahakashaya*, highlighting its relevance in promoting sudation and alleviating body aches. It is used in various forms of *Swedana*, including *Kashaya Sweda*, *Avagaha Sweda* using *Patra Kwatha*, *Nadi Sweda*, *Sankara Sweda*, and *Upanaha Sweda*. Its *Ushna Virya* and *Snigdha Guna* provide an *Ayurvedic* rationale for its potential *Swedajanaka* and *Vatahara* effects, thereby helping to alleviate *Stambha* (stiffness), *Gaurava* (heaviness), and restricted movements. The traditional therapeutic relevance of *Eranda* is further supported by preliminary pharmacological research. Experimental studies have reported anti-inflammatory and immunomodulatory activities associated with tannin constituents isolated from *Ricinus communis* leaves.^[6] These findings provide preliminary scientific support for investigating

its potential role in inflammatory conditions. In another experimental study, seven extracts of *Ricinus communis* such as aqueous, ethanol, methanol, ethyl acetate, chloroform, n-butanol and n-hexane were examined for antioxidant action. Aqueous and methanol extract showed the good DPPH activity and the remaining extracts possessed less DPPH activity. This experiment proved that *Ricinus communis* extract has the potential of antioxidant activity.^[7] however, these findings are based on experimental investigations, and further clinical research is required to establish *Eranda* efficacy in *Swedana* procedures.

In *Upanaha Sweda*, *Eranda Patra* are used because of their broad surface area, soft texture, and ability to retain moisture and oil. These physical characteristics facilitate the uniform application of the medicinal paste and help maintain and transmit heat over the affected region. Thus, *Eranda Patra* may contribute to the practical effectiveness of *Upanaha Sweda* in the management of pain and stiffness.

Role of *Eranda* in *Virechana*: *Eranda Taila* is a traditionally used as a purgative in *Ayurvedic* practice. One of its notable features is its compatibility with various *Anupanas*, including *Payasa*, *Mamsa Rasa*, *Triphala Kwatha*, *Mudga Yusha*, and *Gomutra*. This versatility allows the physician to individualize its administration according to the patient's *Prakriti*, the predominant *Dosha*, and the nature of the disease. *Charaka* describes the use of *Eranda Taila* in *Udara Roga* associated with *Avrita* conditions and in situations where *Niruha Basti* has been retained, highlighting its therapeutic relevance in selected clinical circumstances. Its traditional use as a purgative is consistent with its pharmacological action, which is primarily attributed to ricinoleic acid, the active metabolite responsible for its laxative effect.

Experimental studies have elucidated the mechanism underlying the laxative action of castor oil, demonstrating the involvement of prostaglandin E3 (EP3) receptors in stimulating intestinal motility. Activation of these receptors promotes intestinal smooth muscle contraction and facilitates bowel evacuation. The findings further suggest that selective EP3 receptor agonists with a high first-pass effect may offer an efficient prokinetic action with fewer additional fluid and electrolyte losses than conventional secretory laxatives.^[8] These observations provide a pharmacological basis for understanding the purgative action of *Eranda Taila*.

Role of *Eranda* in *Basti*: In *Basti Chikitsa*, *Eranda* (*Ricinus communis* Linn.) holds particular significance due to its traditionally described properties, like *Vata Shamaka*, *Anulomana*, *Shothahara*, *Bhedana*, and *Vedanasthapana*. These properties provide an *Ayurvedic* rationale for its therapeutic application in conditions associated with pain, stiffness, restricted movements, and the derangement of *Vata Dosha*. The traditional therapeutic potential of *Eranda* is also supported by experimental studies demonstrating its anti-inflammatory and analgesic activities.

Ilavarasan R. et al. evaluated the anti-inflammatory effect of *Ricinus communis* methanolic root extract against a cotton pellet granuloma and carrageenan-induced hind paw oedema model in Wistar albino rats at doses of 250 and 500 mg/kg orally. The *Ricinus communis* root extract in methanol



has powerful anti-inflammatory effects on rats, both chronic and acute, according to the results.^[9] This offers preliminary scientific support for the traditional use of *Eranda Moola* in *Basti Chikitsa*, particularly in conditions associated with inflammation and pain.

Similarly, Banerjee S. et al. against the adjuvant and formaldehyde induced paw oedema paradigm in rats. The results showed that this extract greatly reduced paw oedema and also shown good analgesic efficacy.^[10]

Role of *Eranda* in *Lepa*: *Eranda* (*Ricinus communis*) oil contains ricinoleic acid as its major fatty acid constituent, accounting for approximately 85–90% of its fatty acid composition. Ricinoleic acid has been investigated for its potential anti-inflammatory and analgesic properties, including mechanisms involving vanilloid receptors and modulation of inflammatory mediators. The oil base may also facilitate the penetration of other herbal constituents through the skin. Furthermore, the local application of warm *Eranda Taila* may promote superficial circulation, relieve muscle tension, and reduce stiffness, thereby supporting its potential therapeutic role in conditions associated with pain and restricted mobility.

CONCLUSION

Eranda (*Ricinus communis*) is a uniquely versatile *Dravya* in *Ayurvedic* pharmacology whose *Rasapanchaka* allows its application in nearly every procedure of *Panchakarma*: *Deepana-Pachana*, *Snehana*, *Swedana* (including *Patra Pinda Sweda* and *Upanaha*), *Virechana*, *Basti*, *Nasya*, and *Dhumapana*, its designation as *Vatari* is borne out by the breadth of *vata*-predominant conditions in which it is applied, from *Gridhrasi* and *Amavata* to *Vatarakta*, *Pakshaghata*.

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