



## ROLE OF LEPA (LOCAL APPLICATION) IN KUSHTHA (SKIN DISEASE) W.S.R. TO DADRU: A CLINICAL STUDY

<sup>1</sup>Dr. Jeeta Ram Saini, <sup>2</sup>Dr. Sisir Kumar Mandal and <sup>3</sup>Dr. Ujwala S. Hivale

<sup>1</sup>Assistant Professor, Department of Roga Nidana & Vikriti Vigyana, MJF Ayurveda College, Jaipur.

<sup>2</sup>Associate Professor, Department of Roga Nidana & Vikriti Vigyan, AIIA, Delhi.

<sup>3</sup>Assistant Professor, Department of Panchkarma, MJF Ayurveda College, Jaipur.

\*Corresponding Author: Dr. Jeeta Ram Saini

Assistant Professor, Department of Roga Nidana & Vikriti Vigyana, MJF Ayurveda College, Jaipur.

Article Received on 12/01/2020

Article Revised on 02/02/2020

Article Accepted on 23/02/2020

### ABSTRACT

All dermatologic disorders are coming under the term Kuṣṭha as per Āyurvedika texts. In broad sense Kuṣṭha is the one, which causes vitiation as well as discoloration of the skin. Ācārya Suśruta has mentioned the treatment as lepana, which is a type of Śodhana, because external applications form is the best way to treat Kuṣṭha. Application of lepa enters in to Romakūpa and further gets absorbed through Svedavahi Srotasa and Sirāmukha leading to desired effects. This method of rubbing increases the skin temperature which might be hastening the pilosebaceous uptake and skin permeation of the drug in topical formulation. Dadru, one of the Kṣudra Kuṣṭha makes its powerful grip on modern man and have harmful effect. Dadru can be correlated with modern disease dermatophytes. This condition comes under superficial fungal infection of the skin. Dadru is Rasagata manifestation of Kuṣṭha. Ācārya Suśruta mentioned śodhana lepa as first choice of modality for Tvakagata Kuṣṭha. Lepana karma has been considered as an ideal therapeutic measure for this disease. Modern science also justifies the role of topical therapy in superficial fungal infections of the skin. External application of drugs in skin disease is an important as internal medicine. It helps in providing better and quicker relief in the symptoms. The medicine in the form of a paste used for external application are called as Lepa. Here Eḍagajādi Lepa a combination of five drugs i.e. Cakramarda, Kuṣṭha, Saindhava, Sarṣapa, Vāyaviṅga and Sauvira is selected for research purpose.

**KEYWORDS:** Kuṣṭha, Lepana, Dadru.

### INTRODUCTION

All dermatologic disorders are coming under the term Kuṣṭha as per Āyurvedika texts. Kuṣṭha produces psychological and physical discomforts due to the blemished skin which itself is proved by the name. All Ācārya described skin disease in separate chapter under the heading Kuṣṭha.

Kuṣṭha is always Tridoṣaja in origin and a dominance of a particular Doṣa leads to a specific symptom complex. It is produced invariably by the vitiation of the seven factors viz. 3 Doṣa and 4 Duṣya. But different types of pain, colours etc. are found in Kuṣṭha because of Amśamśakalpanā of Doṣa and Samkhyāvikalpa.<sup>[1]</sup>

Ācārya Suśruta has mentioned the treatment as lepana, because external applications form is best way to treat Kuṣṭha. Furthermore Ācārya Caraka has described Lepana as 'Sādhyā Siddhi Kāraka'.

### Concept of Lepa

The medicine in the form of a paste used for external application are called as Lepa. Lepa means the one, which is used for anointing. Drugs in wet form are to be crushed to prepare in to paste form. If the drugs are in dry form then it should be converted in to paste by adding required amount of specific liquid. This paste is to be applied externally and is known as lepa. According pharmaceutical point of view, Lepa kalpanā is considering as the Upakalpanā of Kalka kalpanā. Āyurvedika classics have mentioned following types of treatment.

- (1) Antaḥ parimārjana
- (2) Bahir parimārjana
- (3) Śāstra pranidhāna

Bahir parimārjana means, the medicine intended for external use. In Āyurveda different form of external application are described for the treatment of different disease.

**Importance of lepa kalpanā**

Ācārya Suśruta has cited “By pouring water over a burning house, the fire gets extinguished immediately, in the same manner, Lepa pacifies the provoked local Doṣā by local application.”<sup>[2]</sup>

**Advantages of external application**

- It can be directly applied at the affected site for quick action.
- It can be easily removed if any irritation occurs.
- Mode of application is easy.

**Synonyms:-** A Lepa is also known as Lipta, Lepa, LEPANA, ĀLEPA.

Ācārya Caraka has described 32 formulations of Lepa in 'Āragvadhīya Adhyāya' but neither he himself nor commentator Cakrapāṇi touched the various Pharmaceutical aspects of Lepa Kalpanā.

**Types of lepa according to Suśruta.**<sup>[3]</sup>

**Pralepa** – It is applied in a thin and cold form and may be applied where Piḍana Karma is not necessary. Used in case of Rakta and Pitta Pradhāna Śoṭha.

**Pradeha** – It is thick or thin warm or cold based on doṣhic involvement and it should not be allowed to dry completely. It is used in Vāta and Śleṣma Pradhāna Śoṭha.

**Ālepa** - It has the quality of both Pralepa and Pradeha.

**Types of lepa according to Aṣṭānṅga Saṁgraha**

Aṣṭānṅga Saṁgrahakara told Pradeha is Śīta, Tanu and used in Rakta Pitta Vikāra. It produces Tvaka Prasādhana. Pralepa is Ūṣṇa, Śīta, thick and used for the purpose of Vāta Śleṣma Śamana. He mentioned 10 types of lepa based on its action.

- **Snehika lepa** – This is ment for Vāta Doṣa and is prepared with Snigdha Dravya or only Sneha.
- **Nirvāpaṇa lepa** – This is ment for Pitta Doṣa used in Pittaja and Viśaja Śoṭha, Agni and Kṣāradagha. Śīta Virya Dravyas are used.
- **Prasādhana lepa** – It has Rakta Prasādhana property.
- **Stambhana lepa** – In additional to the property of Nirvāpaṇa Lepa it has Raktastambhaka property.
- **Vilāyana lepa** – It is used in Śleṣmaja and Medajaśoṭha.
- **Pācana lepa** – It does the Pācana of Apakva Śoṭha. Rūkṣa and Ūṣṇa Dravyas are used.
- **Piḍana lepa** – It is used in Sūkṣma Vraṇa. Rūkṣa and Picchila Dravyas are used.
- **Śodhana lepa** – It is indicated in Asudha Vraṇa. Śodhana Dravyas are used.
- **Ropana dravya** – Used for Ropana of Śūddha Vraṇa.
- **Savarṇakara lepa** – Helps in attaining normal skin colour.

**Types of lepa according to Caraka**

(1) **Śodhana** – It is Tvaka Śūddhikara.

- (2) **Ropana pralepa** – It is used to bind the torn skin.
- (3) **Kāntikara lepa** – It is used in Vraṇa Śaithilyatā and Sukumāra and has Prasādhana property.
- (4) **Mārdvakara lepa** – It is used in Sarūjā Katina Stabdha and Nisravya Vraṇa.
- (5) **Savarṇakara lepa** – It is used for enhancing the colour and complexion.
- (6) **Varṇakara lepa** – It helps in bringing back the Prakrutha Varṇa of Tvacā.
- (7) **Romasanjanana lepa** – It is used for the reproduction of the Roma which is destroyed.
- (8) **Tvaka kārṣṇya kāraka lepa** – It produces Kṛṣṇatva of Tvaka at the applied site.

**General rules to be followed during application of Lepa**

- Pralepa should be applied uniformly and thickness should be 1/3<sup>rd</sup> of an Amgūlī.<sup>[4]</sup>
- Before applying the Lepa, the previous Lepa, which is dried, should be removed. If not it increases the Doṣa.
- Lepa should be removed without washing it in water.
- Lepa used once should not be used again by making it wet.
- After applying lepa nothing should be covered over it
- Fresh Lepa should not be applied over the dried Lepa.
- The Lepa should not be too thin because it dries up before it reaches the Mūla Sthāna and Reduces the Doṣa.
- The thickness of the Lepa should be equal to the wet skin of a buffalo.
- Ālepa should be applied in opposite direction of Romakūpa, and then it enters the Romakūpa and reaches the Svedavaha Srotasa and Sirāmūkha.
- Lepa should not be completely dried except where piḍanakarma is necessary. If dried it produces pain.
- Lepa should not be applied during night time because during night,<sup>[5]</sup> the Ūṣṇatā of Śarīra goes out through Romakūpa; if Lepa is applied the Ūṣṇatā is retained inside, which vitiates the Doṣā.
- Lepa prepared in the previous day should not be used.
- Lepa prepared once should not be kept for long time since it loses its Virya.

**General uses of Lepa**<sup>[6]</sup>

- It is used in the case of Avidagha Śoṭha.
- It does Tvacā Śuddhi and also purifies Māmsa and Rakta.
- It reduces Dāha, Toda and Kanḍū.
- It can be applied in the diseases of Marmasthāna and Guhya Sthāna, where it does the Śuddhi and Śamana of the diseases.

### Probable mode of action of Lepa

#### (a) Importance of Lepa

Application of Lepa enters in to Romakūpa and further gets absorbed through Svedavāhi Srotasa and Sirāmukha,<sup>[7]</sup> leading to desired effects. This method of rubbing increases the skin temperature which might be hastening the pilosebaceous uptake and skin permeation of the drug in topical formulation.

Lepa therapy is included under Bahi Parimārjana Cikitsā. This therapy is specially meant for the Tvakagata Vikāra. The Lepa Cikitsā also facilitates the expulsion of the Doṣā locally. It does tvacā Śuddhi and also purifies Māmsa and Rakta. It reduces Dāha, Toda and Kaṇḍū.

Ācārya Caraka has mention that in Kuṣṭha Roga application of Lepa done after Raktamokṣṇa for better result.<sup>[8]</sup> Ācārya Suśruta has mentioned application of Lepa in all stage of Kuṣṭha Roga either Pūrvarūpa or Rasagata, Raktagata and Māmsagata involvement.<sup>[9]</sup>

#### (b) Mode of action of lepa

When a Lepa is applied over the surface of skin opposite to the direction of hairs on it.<sup>[10]</sup> through a proper base, the active principles of the ingredients of Lepa are released into that base. After that, this combination enters the Romakūpa and further gets absorbed through the Svedavāhi Srotasa and Sirāmukha. Absorption of Lepa depends upon the base through which it is applied. Kāñjī is used as a base of Eḍagajādi Lepa in local application.

Thereafter it is subjected for Pācana by Brajakapitta. In due course of the above transformation, some new metabolites might be forming which pacifies the provoked Doṣā locally and thus breaks the pathogenesis cycle leading to the alleviation in the symptoms. Rakta Dūṣṭi is main factor of Kuṣṭha Roga and according to Ācārya Suśruta Lepa is useful in Pitta and Rakta dominance disease.<sup>[11]</sup>

### Comparison Relief % in Subjective parameters in both Groups.

Subjective parameters	Relief % in Group A	Relief % in Group B
Kaṇḍū	81.78%	60.24%
Rūjā	64.70%	45.45%
Rāga	21.0%	38.03%
No. of Maṇḍala	12.5%	18.0%
Size of Maṇḍala	15.38%	12.79%
Piḍikā	17.86%	26.06%
Visarpaṇa on body	85.36%	87.80%
Visarpaṇa on lesion	98.67%	91.62%
Tāmra varṇa	66.66%	69.61%
Atasī Puṣpa varṇa	55.55%	23.52%

### Lepa can be described in two steps as follows

#### (I) Pilasebaceous uptake

When a Lepa is applied over the surface of skin opposite to the direction of hairs on it,<sup>[12]</sup> through a proper base, the active principles of the ingredients of Lepa are released into that base. After that, this combination enters the Romakūpa and further gets absorbed through the Svedavāhī Srotasa and Sirāmukha.<sup>[13]</sup> However, it should be kept in mind that the pilosebaceous uptake i.e. absorption of Lepa differs as per the site variation, skin condition and more important is the base through which it is applied.

#### (II) Cutaneous biotransformation

Thereafter it is subjected for Pācana by Brañjakāgni viz. the viable epidermis starts off the catabolic degradation of the absorbed material with the help of essential enzymes. In due course of the above transformation, some new metabolites might be forming which pacifies the provoked Doṣā locally and thus breaks the pathogenesis cycle leading to the alleviation in the symptom.

### Result of Lepa in Dadru Kuṣṭha

Total 80 patients were enrolled for the present study, out of which 10 patients discontinued the treatment during the course of trial. They were dropped out from the study, so 70 patients had completed the trial and randomly divided in to following 2 groups.

**Group A:** In this group, Eḍagajādi Lepa for the local application with Kāñjī and Cakramarda Bīja Cūrṇa as an internal use. 40 patients were enrolled in this group out of which 6 patients dropped out and only 34 patients completed the trial.

#### Eḍagajādi Lepa

Dosage- According area of involvement by the disease twice daily

Duration- 6 weeks

#### Cakramarda Bīja Cūrṇa

Dosage- 1 gram twice daily.

Duration- 6 weeks.

Anupana- Luke warm water.

**Group B:** In this group, Eḍagajādi Lepa for the local application with Kāñjī 40 patients were enrolled in this

group out of which 4 patients dropped and only 36 patients completed the trial.

Dosage- According area of involvement by the disease twice daily.

Duration- 6 weeks.

## REFERENCES

1. Agnivesh, Charak Samhita Vol-I (Nidana Sthana). 5/3, Varanasi; Choukhambha Sanskrit Sansthan, 2009.
2. Ambikadutt Shastri, Sushrut Samhita Vol-I (Chikitsa Sthana). 1/15, Varanasi; Choukhambha Sanskrit Sansthan, 2010.
3. Ambikadutt Shastri, Sushrut Samhita Vol-I (Sutra Sthana). 18/6, Varanasi; Choukhambha Sanskrit Sansthan, 2010.
4. Ambikadutt Shastri, Sushrut Samhita Vol-I (Sutra Sthana). 18/12, Varanasi; Choukhambha Sanskrit Sansthan, 2010.
5. Ambikadutt Shastri, Sushrut Samhita Vol-I (Sutra Sthana). 18/13, Varanasi; Choukhambha Sanskrit Sansthan, 2010.
6. Ambikadutt Shastri, Sushrut Samhita Vol-I (Sutra Sthana). 18/8-11, Varanasi; Choukhambha Sanskrit Sansthan, 2010.
7. Ambikadutt Shastri, Sushrut Samhita Vol-I (Sutra Sthana). 18/4, Varanasi; Choukhambha Sanskrit Sansthan, 2010.
8. Agnivesh, Charak Samhita Vol-II (Chikitsa Sthana). 7/104, Varanasi; Choukhambha Sanskrit Sansthan, 2009.
9. Ambikadutt Shastri, Sushrut Samhita Vol-I (Chikitsa Sthana). 9/6, Varanasi; Choukhambha Sanskrit Sansthan, 2010.
10. Ambikadutt Shastri, Sushrut Samhita Vol-I (Sutra Sthana). 18/4, Varanasi; Choukhambha Sanskrit Sansthan, 2010.
11. Ambikadutt Shastri, Sushrut Samhita Vol-I (Sutra Sthana). 18/6, Varanasi; Choukhambha Sanskrit Sansthan, 2010.
12. Ambikadutt Shastri, Sushrut Samhita Vol-I (Sutra Sthana). 18/4, Varanasi; Choukhambha Sanskrit Sansthan, 2010.
13. Ambikadutt Shastri, Sushrut Samhita Vol-I (Sutra Sthana). 18/4, Varanasi; Choukhambha Sanskrit Sansthan, 2010.