

Siddha Ghrita Formulations in Charaka Samhita Chikitsasthana: A Classification Based on Routes of Administration (Bahya And Abhyantara Prayoga)

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ABSTRACT

Bhaishajya Kalpana, the branch of Ayurveda concerned with pharmaceutical formulation, describes a wide range of dosage forms of which Sneha Kalpana the preparation of medicated fats holds a prominent therapeutic position. Among these, Ghrita Kalpana (medicated ghee preparations) is regarded as superior owing to the unique Yogavahi (synergist) property of Go Ghrita (cow ghee), which enables it to assimilate and potentiate the therapeutic qualities of co-processed drugs without losing its own inherent characteristics. The present study aims to classify all Siddha Ghrita formulations mentioned in Charaka Chikitsa Sthana according to their route of administration Bahya Prayoga (external application) and Abhyantara Prayoga (internal application) thereby providing a clinically and pharmaceutically structured reference. A classical literary review methodology was adopted. All 30 chapters of Charaka Chikitsa Sthana were reviewed sequentially. A total of more than 200 Siddha Ghrita Kalpana was identified across 30 Adhyayas. Among these, formulations indicated specifically for Bahya Prayoga include 12 for Abhyanga, 3 for Lepa, 1 for Avagaha, and 3 for Parisheka. For Abhyantara Prayoga, 10 formulations were indicated for Nasya and 8 for Basti. The majority of remaining formulations were prescribed for Pana (oral administration). Several formulations were found to be dual-route, indicated for both Bahya and Abhyantara Prayoga. Charaka Samhita contains a remarkably rich repertoire of Siddha Ghrita Kalpana with diverse routes of administration. The present application-based classification provides a structured reference for future pharmacological evaluation, pharmaceutical standardisation, and clinical validation of these classical formulations.

Keywords: Siddha Ghrita Kalpana, Bhaishajya Kalpana, Yogavahi, Abhyanga, Lepa, Ayurveda.

INTRODUCTION

Ayurveda has a highly evolved and systematised approach to drug formulation known as Bhaishajya Kalpana. This discipline encompasses a wide range of dosage forms from basic aqueous preparations to complex oleaginous formulations designed to maximise therapeutic efficacy while ensuring palatability, safety, and bioavailability.

Among all dosage forms described in classical Ayurvedic texts, Sneha Kalpana the preparation of medicated fats holds a position of special therapeutic significance.(1) Sneha Kalpana is broadly classified into Taila Kalpana (medicated oils) and Ghrita Kalpana (medicated ghee preparations), of which the latter is considered superior on account of its unique capacity to assimilate the properties of co-processed substances without losing its own inherent qualities.(2)

Ghrita Kalpana, prepared through the classical pharmaceutical process of Sneha Paka, involves the systematic co-processing of Go Ghrita (clarified cow butter) with a Kalka (herbal paste) and one or more liquid media (Drava Dravyas) under controlled heat until specific physicochemical endpoints are achieved.(3) The lipophilic nature of Ghrita renders it an effective vehicle for transferring active phytoconstituents across biological membranes a property that modern pharmacy has independently recognised in liposomal drug delivery systems.(4) This unique pharmacokinetic advantage makes Ghrita-based formulations particularly effective across multiple routes of administration, including both internal (Abhyantara Prayoga) and external (Bahya Prayoga) applications.(9)

Among classical Ayurvedic treatises, Charaka Samhita, one of the foundational texts of the Brihat Trayee contains the most comprehensive compilation of Siddha Ghrita formulations, particularly within its Chikitsa

Sthana (clinical therapeutics section). A Siddha Ghrita refers to a ghee preparation that has been pharmaceutically processed to completion and is ready for therapeutic use. (5,7)

The present study focuses specifically on classifying these formulations according to their route of application. While the majority of Siddha Ghritas in Charaka Chikitsa Sthana are prescribed for oral administration (Pana), a clinically significant subset is prescribed for Bahya Prayoga including Abhyanga (therapeutic massage), Lepa (topical application), Avagaha (immersion bath), and Parisheka (pouring/streaming) and for specialised internal routes such as Nasya (nasal instillation) and Basti (medicated enema). (8,9) This classification-based article presents those formulations in an organised tabular format.

MATERIALS AND METHODOLOGY

Nature and Design of the Study

The present study is designed as a classical literary review based entirely on primary textual sources. The methodological approach follows the tradition of Tantrayukti, the analytical framework of systematic classical inquiry described within Ayurvedic scholarly tradition wherein concepts are first identified, then compiled, and subsequently interpreted in light of their broader therapeutic context. (6) No experimental subjects, clinical data, or laboratory procedures were involved. Ethical clearance was therefore not applicable.

Primary Source

The sole primary source for this study was Charaka Samhita, composed originally by Agnivesha and subsequently redacted by Charaka and Dridhabala. The edition referred to throughout is the critically edited Hindi commentary version by Pt. Kashinath Shastri and Dr. Gorakhanath Chaturvedi, published by Chaukhamba Bharati Academy, Varanasi. (7) The study was confined exclusively to the Chikitsa Sthana (section on therapeutics), which comprises 30 Adhyayas (chapters). (8)

Inclusion and Exclusion Criteria

Table 1: Inclusion and Exclusion Criteria for Siddha Ghrita Kalpanas.

Criterion Type	Details
✓ Included	All Siddha Ghrita Kalpana explicitly named and described within the 30 chapters of Charaka Chikitsa Sthana, regardless of their indication or route of administration
✓ Included	Preparations referred to as Ghrita with a completed pharmaceutical process (Siddha state), used for both internal and external purposes
✗ Excluded	Ghrita formulations mentioned in other Sthanas of Charaka Samhita (Sutra, Kalpa, Siddhi Sthana, etc.)
✗ Excluded	Formulations from other classical texts such as Sushruta Samhita or Ashtanga Hridayam, even where parallel references exist
✗ Excluded	Any Taila (oil-based), Avaleha, or other non-ghee formulations, even if co-administered with Ghrita

Classification Methodology

Each of the 30 chapters of Charaka Chikitsa Sthana was reviewed sequentially. Every Siddha Ghrita formulation was classified according to its prescribed route of administration, based on the therapeutic instructions within the corresponding shloka and its commentary (Tika) by Chakrapani Datta. (6,9) Formulations administered through internal routes were grouped under Abhyantara Prayoga, while those applied externally were categorised as Bahya Prayoga. (1) Where a single formulation was indicated for both routes, it was recorded under both categories. All remaining Siddha Ghritas not listed in the classification tables are indicated exclusively for Pana (oral administration), which constitutes the predominant group. (5,7)

RESULTS AND CLASSIFICATION

A systematic, chapter-by-chapter review of all 30 Adhyayas of Charaka Chikitsa Sthana yielded a total of more than 200 distinct Siddha Ghrita Kalpana. (5,7) Each formulation was verified against the corresponding shloka and the commentary of Chakrapani Datta before being entered into the compilation. The distribution across chapters was not uniform therapeutically dense Adhyayas dealing with Unmada, Apasmara, Vatavyadhi, and Rasayana contained a markedly higher concentration of Ghrita formulations.

Bahya Prayoga (External Application)

Bahya Prayoga refers to the external application of a medicinal preparation. In the context of Siddha Ghritas, this includes application through the skin, mucous membranes, and body cavities without ingestion. (1,9) Four modes of external application are described in Charaka Chikitsa Sthana: Abhyanga (therapeutic massage), Lepa (topical paste application), Avagaha (immersion/sitz bath), and Parisheka (streaming/pouring). The lipid base of Ghrita facilitates percutaneous absorption of incorporated herbal constituents, making it well suited for all these external modes. (4)

Table 2: Siddha Ghritas indicated for Bahya Prayoga (Abhyanga, Lepa, Avagaha, Parisheka).

Sr. No.	Type of Application	Siddha Ghrita	Reference (Ch. Chi.)
1	Abhyanga	Vipadikahara Ghrita-Taila (Yamak Sneha) only Abhyanga	Ch. Chi.7/120-121
2	Abhyanga	Tiktak Ghrita	Ch. Chi.7/133
3	Abhyanga	MahaKhadir Ghrita	Ch. Chi.7/152-156
4	Abhyanga	Lashunadya Ghrita	Ch. Chi.9/49-51
5	Abhyanga	Amrita Ghrita	Ch. Chi.23/242-249
6	Abhyanga	Siddha Sheeta Ghrita only Abhyanga	Ch. Chi.26/49
7	Abhyanga	Mahamayura Ghrita	Ch. Chi.26/166-175
8	Abhyanga	Mahamayura Ghrita, Mamsa Siddha	Ch. Chi.26/166-175
9	Abhyanga	Dashamooladi Ghrita	Ch. Chi.28/119
10	Abhyanga	Mutra, Kshaar, Sura – Siddha Ghrita only Abhyanga	Ch. Chi.29/145
11	Abhyanga	Padmakadi Ghrita	Ch. Chi.29/146
12	Abhyanga	Vatanashak Siddha Ghrita	Ch. Chi.30/41
13	Lepa	Durva Swaras Siddha Ghrita only Lepa	Ch. Chi.21/96
14	Lepa	Patola, Neem, Trifala – Siddha Ghrita only Lepa	Ch. Chi.21/97
15	Lepa	Jivaniya Gana Siddha Ghrita only Lepa	Ch. Chi.29/138
16	Avagaha	Vatanashak Dravya Siddha Ghrita only Avagaha	Ch. Chi.28/109
17	Parisheka	Dashamoola Ghrita	Ch. Chi.29/124
18	Parisheka	Madhura Gana Siddha Chatuhsneha only Parisheka	Ch. Chi.29/125
19	Parisheka	Padmakadi Ghrita	Ch. Chi.29/146

Table No. 2 observed, formulations indicated specifically for Bahya Prayoga include 12 for Abhyanga, 3 for Lepa, 1 for Avagaha, and 3 for Parisheka.

Abhyantara Prayoga (Internal Application: Nasya and Basti)

Abhyantara Prayoga encompasses all routes of drug administration that involve entry into the internal environment of the body. The predominant route for Siddha Ghritas across Charaka Chikitsa Sthana is oral (Pana); however, two other specialised internal routes Nasya (nasal instillation) and Basti (medicated enema) are also described for a distinct subset of formulations. (5,7,9)

Nasya refers to the administration of medicated substances through the nasal route. Classical texts describe the nose as the gateway to the brain (Nasahi Shiraso Dwaram), making Nasya a particularly important route for CNS-targeted therapies. (9) Contemporary neuroscience has independently validated this nose-to-brain pathway as an effective method for bypassing the blood-brain barrier. (11) Basti refers to the introduction of medicated substances into the body through the anal, urethral, or vaginal route. It is regarded as the most important of all Panchakarma procedures described as the half or totality of all therapeutic measures (Ardha Chikitsa). (9) Modern pharmacology confirms that the rectal route achieves significant systemic drug levels by bypassing hepatic first-pass metabolism. (4,11)

Table 3: Siddha Ghritas indicated for Abhyantara Prayoga (Nasya and Basti)

Sr. No.	Type of Application	Siddha Ghrita	Reference (Ch. Chi.)
1	Nasya	Bala, Vidarigandhadi – Siddha Ghrita + Lavana only Nasya	Ch. Chi.8/90
2	Nasya	Madhuka, Vidari – Siddha Ghrita + Lavana only Nasya	Ch. Chi.8/90
3	Nasya	Prapaundarika, Yastimadhu, Pippali, Bruhati, Bala Siddha Ghrita only Nasya	Ch. Chi.8/91
4	Nasya	Lashunadya Ghrita	Ch. Chi.9/49-51

5	Nasya	Madhura Gana Aushadhi Siddha Ghrita	Ch. Chi.17/133
6	Nasya	Virechak Dravya Siddha Ghrita	Ch. Chi.17/135
7	Nasya	Rasna Ghrita	Ch. Chi.18/43-46
8	Nasya	Amrita Ghrita	Ch. Chi.23/242-249
9	Nasya	Mahamayura Ghrita	Ch. Chi.26/166-175
10	Nasya	Mahamayura Ghrita, Mamsa Siddha	Ch. Chi.26/166-175
11	Basti	Rasna Ghrita	Ch. Chi.18/43-46
12	Basti	Changeri Ghrita	Ch. Chi.19/43
13	Basti	Shatpushapadi Ghrita	Ch. Chi.19/62
14	Basti	Mahamayura Ghrita	Ch. Chi.26/166-175
15	Basti	Mahamayura Ghrita, Mamsa – Siddha	Ch. Chi.26/166-175
16	Basti	Dashamooladi Ghrita	Ch. Chi.28/119
17	Basti	Shukradosha Nashak Ksheera Siddha Ghrita only Basti	Ch. Chi.30/194
18	Basti	Gambhari, Kutaj Kwatha Siddha Ghrita only Basti (Uttarbasti)	Ch. Chi.30/100

Table No. 3 observed, formulations indicated specifically for Abhyantara Prayoga, 10 formulations were indicated for Nasya and 8 for Basti.

DISCUSSION

Significance of Ghrita as a Preferred Therapeutic Vehicle

The high number of Siddha Ghrita formulations encountered across the Adhyayas of Charaka Chikitsa Sthana reflects a deliberate pharmacological rationale embedded within the Ayurvedic system. Charaka explicitly describes Go-Ghrita as possessing the property of Yogavahi the capacity to carry and potentiate the qualities of drugs incorporated into it without losing its own inherent therapeutic character. (10) From a contemporary pharmacological perspective, this property aligns with the behaviour of lipid-based drug delivery systems (LBDDS), which enhance the absorption and bioavailability of both lipophilic and hydrophilic phytoconstituents by facilitating their transport across biological membranes, including the blood-brain barrier. (4,11) The frequent prescription of Ghrita formulations in conditions such as Unmada and Apasmara which involve central nervous system pathology may therefore reflect an intuitive classical understanding of lipid-mediated CNS drug delivery. (3,11)

Rationale for Bahya Prayoga

The external application of medicated Ghrita through Abhyanga, Lepa, Avagaha, and Parisheka is therapeutically significant in its own right. The lipid base of Ghrita facilitates percutaneous absorption of incorporated herbal constituents. (4) This is particularly relevant for Abhyanga in skin disorders (Kustha), neurological conditions (Vatavyadhi), and conditions requiring localised anti-inflammatory action. The presence of Avagaha and Parisheka as prescribed modes further underscores the classical understanding of transdermal drug delivery as a viable therapeutic route an understanding now validated by modern pharmaceutical research. (4,11)

Nasya: Classical Evidence for Intranasal Drug Delivery

The prescription of medicated Ghrita through the nasal route for conditions such as Rajyakshma (consumption), Shiroroga (head disorders), respiratory conditions, and psychiatric disorders represents a sophisticated classical understanding of the nose-to-brain pathway. (9) Contemporary neuroscience has validated this concept through research on intranasal drug delivery as a method of bypassing the blood-brain barrier for CNS-targeted therapy, making these classical Nasya references worthy of systematic pharmacological investigation. (11)

Basti- The Foremost of Panchakarma Procedures

The use of medicated Ghrita as a Basti medium reflects Charaka's recognition of the colon as the primary site of Vata and as a gateway for systemic absorption. (9) Modern pharmacology confirms that the rectal route can achieve significant systemic drug levels by bypassing hepatic first-pass metabolism, providing a rational basis for the classical preference for Basti in conditions such as Atisara (diarrhoea), Vatavyadhi (Vata disorders), and gynaecological conditions. (4,11) The inclusion of Uttarbasti (vaginal Basti) among the classified formulations also highlights the breadth of classical application. (5,7)

Dual- Route Formulations

Several formulations notably Lashunadya Ghrita, Amrita Ghrita, Mahamayura Ghrita, Dashamooladi Ghrita, and Padmakadi Ghrita appear across more than one classification category, being prescribed for both Bahya and

Abhyantara Prayoga within the same or adjacent shlokas. (5,7) This dual-route prescribing reflects the versatility of Ghrita as a delivery vehicle a characteristic with no direct parallel in modern single-route dosage form design, and one that merits further pharmacological evaluation. (3,11)

CONCLUSION

The present application-based classification of Siddha Ghrita Kalpana from Charaka Samhita Chikitsa Sthana demonstrates that classical Ayurvedic pharmacopeia recognised and utilised the full spectrum of available routes of administration for medicated Ghrita preparations. While oral (Pana) administration predominates, the systematic compilation of formulations prescribed for Abhyanga, Lepa, Avagaha, Parisheka, Nasya, and Basti provides a structured and clinically relevant reference that has not previously been presented in this format. (5,7) The findings reinforce the continued relevance of Charaka Samhita as a living reference for pharmaceutical and clinical research in Ayurveda. (6) Each mode of application described herein has a rational pharmacological basis that aligns with contemporary understanding of drug delivery whether through transdermal absorption (Abhyanga, Parisheka, Avagaha), nose-to-brain delivery (Nasya), or rectal/vaginal absorption (Basti). (4,11) It is hoped that this structured compilation will serve as a foundational dataset for future pharmacological evaluation and clinical validation of individual Siddha Ghrita formulations. (3)

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