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UNDERSTANDING THE EFFECT OF *ANU TAILA NASYA* IN THE MANAGEMENT OF *KHALITYA* – A REVIEW

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ABSTRACT

Khalitya (baldness) is a progressive disorder of the scalp characterised by gradual or patchy loss of hair due to vitiation of the *Tridosha* at the follicular level. Classical *Ayurvedic* texts describe it among *Shiro Roga* and emphasize its management through therapies aimed at systemic balance rather than symptomatic relief. Modern approaches such as topical applications and surgical techniques often provide only temporary improvement, highlighting the need for holistic and sustainable interventions. In *Ayurveda, Nasya Karma*, the administration of medicated oil through the nasal route is considered one of the foremost therapies for disorders of the head. Among the various formulations, *Anu Taila* has been widely indicated both for preventive and curative purposes. With its *Tridosha-Shamaka, Srotoshodhana* and *Rasayana* properties, *Anu Taila Nasya* holds potential as a safe and effective therapy for maintaining scalp health and managing hair loss.This review compiles classical references, ingredient details and explores its probable mechanism of action in *Khalitya*. The discussion integrates *Ayurvedic* concepts with modern physiological reasoning highlighting *Anu Taila Nasya* as a promising holistic approach for managing hair loss and maintaining scalp health.

KEYWORDS: *Khalitya, Nasya Karma, Anu tail, Ayurveda*, Baldness, Hair loss management.

I. INTRODUCTION

In the present era, *Khalitya* (baldness) has emerged as a significant health and cosmetic concern affecting both men and women across various age groups. While the exact prevalence varies among populations, epidemiological surveys indicate that male pattern baldness (androgenetic alopecia) affects over 50% of men above the age of 50 with early onset often occurring in their 30s. In women, diffuse hair thinning or telogen effluvium is frequently observed after pregnancy which is attributed to hormonal fluctuations, nutritional deficiencies or stress. Although *Khalitya* is not a life-threatening condition, it significantly impacts cosmetic appearance and consequently an individual's confidence and social interactions. From a cosmetology perspective, its growing incidence has made it an important area of clinical attention. In modern medicine, the available treatment options for baldness are topical applications (e.g., minoxidil), systemic medications (e.g., finasteride), nutritional supplements, low-level laser therapy and surgical interventions like hair transplantation. These approaches often provide temporary or symptomatic relief but do not address systemic imbalance or root cause. In contrast *Ayurveda* adopts a holistic approach focusing on *Dosha-Samyak Pratipatti* (restoration of *Dosha* balance), *Srotas* cleansing and *Dhatu Poshana* (nourishment of tissues). The therapeutic objective is not only to restore hair growth but also to address the underlying systemic imbalances and maintain overall scalp and head health.

Within *Ayurveda, Panchkarma* plays a central role in the purification and rejuvenation of the body. *Nasya Karma*, one of the five principal purification therapies is specifically indicated for disorders above the clavicle (*Urdhva Jatrugata Roga*) including *Shiro Roga*. Classical *Ayurvedic* texts classify *Khalitya* under *Shiro Roga* due to its anatomical location and pathogenesis

recommending a combination of *Shodhana* and *Shamana* measures. Among these, *Anu Taila Nasya* is highlighted as a potent intervention—used seasonally for prevention as per *Ritucharya* guidelines as well as therapeutically after appropriate preparatory procedures.

II. AIMS AND OBJECTIVES

1. To study the concept of *Khalitya* as described in classical *Ayurvedic* texts.
2. To review the classical and modern understanding of *Nasya Karma* in hair disorders.
3. To evaluate the preventive and therapeutic role of *Anu Taila Nasya* in *Khalitya.*
4. To correlate *Ayurvedic* principles with modern pharmacological perspectives.

III. MATERIALS AND METHODS

1. Review of *Brihattrayi* and other classical *Ayurvedic* texts for references to *Khalitya, Nasya Karma* and *Anu Taila.*
2. Compilation of pharmacological data for each ingredient of *Anu Taila.*

IV REVIEW OF LITERATURE

1. Khalitya

In *Ayurvedic* literature, hair loss is predominantly discussed under two related conditions — *Khalitya* and *Indralupta*. While both conditions involve hair fall, their progression and distribution differ. According to classical descriptions, vitiated *Pitta* in association with *Vata* reaches the *Romakoopa* (hair follicles) and destroys the hair shafts leading to shedding. Subsequently, *Kapha* mixed with *Rakta* obstructs the follicular pores thereby preventing the emergence of new hair. This pathological sequence is mentioned in reference to *Indralupta, Khalitya* and *Ruhya*.[1]

Acharya Vagbhata differentiates the two

- In *Indralupta,* hair loss occurs suddenly, often in localized patches.
- In *Khalitya,* the shedding is gradual and progressive, usually diffuse across the scalp.

Dosha*-based Varieties of *Khalitya

a) *Vataja Khalitya* – The scalp becomes dry, rough, and lacks luster, often resembling skin scorched by heat.

b) *Pittaja Khalitya* – The scalp shows warmth, excessive sweating and visible engorgement of blood vessels.

c) *Kaphaja Khalitya* – The scalp skin appears thick, pale and oily in texture.

d) *Sannipataja Khalitya* – Produce mixed symptoms along with a nail-like sheen on the scalp. This form is generally difficult to cure. Additionally *Khalitya* with features like complete loss of hair and burning sensation, resembling fire-burnt skin, is also considered difficult to treat.[2]

2. *Anu Tail Nasya*

Classical texts describe *Anu Taila Nasya* as one of the most important procedures for maintaining the health of the *Uttamanga* (head region). Its use is highlighted both as a preventive regimen and as a therapeutic intervention in *Urdhvajatrugata Vyadhis* including *Keshapata* and *Khalitya.*

A. *Navana Nasya* (*Snehan* type) - Involves instillation of medicated oil (e.g., *Anu Taila*) into the nostrils. It exerts *Vata–Kapha Hara* and *Pitta–Rakta Hara* effects thereby preventing premature greying, falling of hair and providing strength to the neck, shoulders, chest and sense organs.

B. *Shamana Nasya* - Used specifically for pacifying aggravated *Pitta* or *Pitta-Vata Dosha* which are central in the pathogenesis of *Khalitya*. Classical indications include *Keshadosha*[3] (alopecia and hair greying) and disorders of eyes, nose and cranial region. *Anu Taila* is considered the best *Sneha* for *Shamana Nasya*.

Preventive and Therapeutic Role

i. Preventive *(Ritucharya):* Recommended in *Sharad, Varsha*, and *Vasant Ritus* for preserving hair colour, strength and preventing premature hair fall.[4]

ii. Therapeutic *(Vyadhi Avastha):* Can be administered in any season according to *Dosha* predominance.

• *Kapha* disorders – morning
• *Pitta* disorders – midday
• *Vata* disorders – evening/night.[5]

Properties of *Anu Tail Dravyas*

Ingredient	Botanical Name	*Rasa*	*Guna*	*Veerya*	*Vipaka*	*Dosha-Ghanta*	*Karma*
Chandan[6]	*Santalum album*	*Madhura, Tikta*	*Laghu, Ruksha*	*Sheeta*	*Katu*	*Kapha-Pitta Shamak*	*Daha-Shamak*
Agaru[7]	*Aquilaria agallocha*	*Katu, Tikta*	*Snigdha, Tikshna, Laghu*	*Ushna*	*Katu*	*Vata-Hara, Kapha-Hara, Pittlam*	*Tvachaya, Shiro-Virechana,*
Tejpatra[8]	*Cinnamomum tamala*	*Katu, Madhura*	*Laghu, Pichchil, Tikshna*	*Ushna*	*Katu*	*Kapha-Vata-Hara*	*Ruchya, Arshoghana*

Daru-Haridra[9]	*Berberis aristata*	*Tikta,*	*Ruksha*	*Ushna*	*Katu*	*Kapha-Pitta Shamak*	*Dosha Pachana*
Mulethi[10]	*Glycyrrhiza glabra*	*Madhura*	*Guru, Snigdha*	*Sheeta*	*Madhura*	*Vata-Pittajit*	*Rakta-Prasadan, Varnya, Balya, Vrishya, Chakshushya*
Bala[11]	*Sida cordifolia*	*Madhura*	*Laghu, Snigdha*	*Sheeta*	*Madhura*	*Vata Shamak, Pitta Shamak*	*Balya*
Sukshma Ela[12]	*Elettaria cardamomum*	*Katu, Madhura*	*Laghu*	*Sheeta*	*Madhura*		*Hridya, Rochana, Deepana, Anulomana*
Vidanga[13]	*Embelia ribes*	*Katu, Tikta*	*Laghu, Ruksha, Tikshna*	*Ushna*	*Katu*	*Vata-Kapha-Shamak*	*Krimi-Nasana, Anulomana, Deepana*
Bilva[14]	*Aegle marmelos*	*Katu, Kashaya, Tikta*	*Laghu, Ruksha*	*Ushna*	*Katu*	*Vata-Kapha-Hara*	*Grahi, Deepana, Pachana, Balya*
Utpala (Blue Lotus)[15]	*Nymphaea stellata*	*Madhur, Kashaya*	*Pichchil, Snigdha*	*Sheeta*	*Madhura*	*Pitta-Hara, Rakta-Prasadak*	*Keshya, Medhya Rasayana, Ruchya*
Hrivera	*Vetiveria zizanioides*	*Tikta*	*Laghu, Ruksha*	*Sheeta*	*Katu*	*Pitta Shamak*	*Dahahara, Shothahara, Varnya*
Abhaya (Khus)	*Vetiveria zizanioides (root)*	*Madhura, Tikta*	*Laghu, Ruksha*	*Sheeta*	*Katu*	*Kapha Shamak, Pitta Shamak*	*Swedop-Nayan*
Vanaya	*Cyperus platystylis*	*Tikta, Katu, Kashaya*	*Laghu, Ruksha*	*Sheeta*	*Katu*	*Kapha-Pitta Shamak*	-
Dalchini[16]	*Cinnamomum zeylanichum*	*Katu, Tikta, Madhura*	*Laghu, Ruksha, Tikshana*	*Ushna*	*Katu*	*Kapha-Vata-Hara*	*Vishghana, Ruchya*
Musta[17]	*Cyperus rotundus*	*Tikta, Katu, Kashaya*	*Laghu, Ruksha*	*Sheeta*	*Katu*	*Pitta-Kapha Shamak*	*Deepana, Pachana, Shothahara, Grahi,*
Sariva[18]	*Hemidesmus indicus*	*Madhura*	*Guru, Snigdha*	*Sheeta*	*Madhura*	*Tridosh-Nashana*	*Deepana, Ama-Nashana, Vishghana, Rakta-Shodhak, Jwarahara*
Sthira[19]	*Desmodium gangeticum*	*Tikta, Madhura*	*Guru*	*Ushna*	*Madhura*	*Tridosha-Hara, Vatajit*	*Balya, Vrishya, Rasayana, Sarv-Doshhara,*
Jivanti	*Ledtadenia reticulata*	*Madhura*	*Snigdha, Laghu*	*Sheeta*	*Madhura*	*Tridosha-Hara*	*Jeevaniya, Balya, Rasayan, Daha-Shamak*
Prishniparni[20]	*Uraria picta*	*Madhura, Katu, Amla, Tikta*	*Laghu, Sara*	*Ushna*	*Madhura*	*Tridosha-Hara*	*Balvardhak, Vrishya, Deepana, Sangrahi, Shothhara, Jivanu-Nashak*
Suradaru[21]	*Cedrus deodara*	*Tikta,*	*Laghu, Snigdha*	*Ushna*	*Katu*	*Vata-Hara, Kapha-Hara*	*Dushta-Vrana Shodhak*
Shatavari[22]	*Asparagus racemosus*	*Madhura, Tikta*	*Guru, Snigdha*	*Sheeta*	*Madhura*	*Kapha-Vataghana, Pitta-Hara, Vata-Hara*	*Rasayana, Balya, Medhya*
Renuka[23]	*Vitex negundo*	*Tikta, Kashaya, Katu*	*Laghu, Ruksha*	*Sheeta, Ushna*	*Katu*	*Pitta-Nashana, Vata-Hara*	*Keshya, Netrya. Pidahara*

Brihati[24]	*Solanum indicum*	*Tikta, Katu*	*Laghu,*	*Ushna*	*Katu*	*Vata-Hara, Kapha-Hara*	*Deepana, Pachana, Grahi*
Vyaghri[25]	*Solanum xanthocarpum*	*Tikta, Katu*	*Laghu, Ruksha*	*Ushna*	*Katu*	*Kapha-Vata Shamak*	*Deepana, Pachana , Amadosh-Nashaka, Shothahara,*
Surabhi[26]	*Pluchea lanceolata*	*Tikta*	*Guru*	*Ushna*	*Katu*	*Kapha-Vata Shamak*	*Vedna-Sthapan, Vishaghan, Rasayan*
Padmakesar[27]	*Nelumbo nucifera*	*Tikta, Madhura, Kashaya, Katu, Lavana*	*Guru, Ruksha*	*Sheeta*	*Madhura*	*Pitta-Hara, Kapha-Hara, Rakta-Dushti-Hara*	*Vrishya, Varnya, Krimighna, Daha-Shamak, Sangrahi,*
Tila Tail	*Sesamum indicum*	*Madhura, Tikta, Kashaya*	*Guru, Snigdha*	*Ushna*	*Madhura*	*Vata-Kapha Shamak*	*Balya, Brimhaniya*
Aja Dugdha	-	*Kashya, Madhura*	*Laghu*	*Sheeta*	*Madhura*	-	*Deepan, Sarva-Vyadhihara*

V. MODE OF ACTION OF *NASYA* – CLASSICAL AND MODERN PERSPECTIVE

Nasya is one of the most important *Panchakarma* procedures indicated for *Urdhvajatrugata Vyadhi* (disorders of the region above the clavicle). According to the principle of *Panchakarma*, the nearest route is considered best for elimination of localized vitiated *Doshas* and in the case of head disorders, the nearest and most effective route is the nose -*Nasa hi Shiraso Dwaram*.

1. Classical Understanding

- *Acharya Charaka* describes that *Nasya* delivers medicines directly to the *Shirobhaga*, preventing the adherence of vitiated *Doshas* and facilitating their elimination.
- *Acharya Vagbhata* further explains that *Nasya* spreads through the *Shringataka Marma* and reaches the *Murdha, Netra, Karna, Kantha* and vascular channels thus expelling the accumulated *Doshas*.[28]
- *Acharya Sushruta* highlights its direct relation with the cranial cavity, even describing complications like *Mastulunga Srava* (CSF leakage) in excessive use which modern science also acknowledges as nose–CNS connectivity.

2. Modern Perspective of *Nasya*

Recent research on intranasal drug delivery supports the *Ayurvedic* principle *"Nasa hi Shiraso Dwaram."*

- **Anatomical basis:** The nasal cavity (15–20 ml volume, ~150 cm² surface area) is highly vascular and permeable. Its respiratory mucosa ensures rapid systemic absorption while the olfactory region provides direct access to the CNS.

- **Mechanisms of absorption**

• *Transcellular diffusion* for lipophilic drugs (e.g., *Sneha Nasya* with medicated oils).
• *Paracellular diffusion* for hydrophilic preparations (e.g., *Kwatha, Dugdha Nasya*).
• *Carrier-mediated / vesicular transport* for specific phytoconstituents.

- **Pathways of action**

• *Vascular route* – rich submucosal capillaries allow rapid absorption, bypassing hepatic first-pass metabolism and improving head circulation.
• *Neural route* – drugs reach the brain via olfactory epithelium and trigeminal pathways explaining *Nasya's* neurological and cranial effects.

- **Facilitating absorption:** Classical *Purvakarma* (*Abhyanga* and *Mridu Swedana*) enhances vasodilation and circulation, paralleling modern pharmacology's view on improved drug uptake.[29]

VI. PROBABLE MODE OF ACTION OF *ANU TAILA NASYA* IN *KHALITYA* (INGREDIENT-BASED ACTION)

In the pathogenesis of *Khalitya*, aggravated *Pitta* in association with *Vata* damages the *Romakoopa* (hair follicles) followed by *Kapha-Rakta* obstruction which prevents new hair growth. *Anu Taila Nasya* counters this pathology at multiple levels through the synergistic action of its herbal ingredients.

1. *Vata–Pitta Shamana* (Pacification of Scorching and Dryness)

Chandan, Utpala, Bala, Shatavari, Sariva, Jivanti – *Sheeta Virya* and *Snigdha Guna* relieve burning, scalp heat and dryness. They counteract excessive *Pitta* (scorching of follicles) and *Vata* (roughness, brittleness of hair shafts).

2. *Kapha–Rakta Srotorodha Shodhana* (Clearing Follicular Blockages)

Agaru, Vidanga, Daruharidra, Musta, Suradaru, Bilva – *Tikshna, Lekhana* and *Shothahara* properties help remove *Kapha-Rakta* plugs. This restores the patency of *Romakoopa* and allows regrowth.

3. *Kesha Moola Poshana* (Nourishment of Hair Follicles)

Mulethi, Shatavari, Jivanti, Padmakesar, Utpala Rasayana and *Balya* properties support *Rasa–Rakta Dhatu Poshana. Tila Taila* as the base provides deep

penetration and acts as *Vata-Kapha Hara* ensuring nourishment reaches the roots. *Aja Dugdha* possesses *Brihana* and *Sheeta Virya* which help in nourishing and cooling the scalp tissues.

4. *Rasayana* & *Balya* Effect (Rejuvenation and Strengthening)

Jivanti, Shatavari, Sariva, Bala, Prishniparni, Sthira – Rasayana action rejuvenates follicles, increases vitality of hair and improves density. These also strengthen *Asthi* and *Majja Dhatus*, indirectly supporting *Kesha* growth.

5. *Shiro Bala Vriddhi* (Enhancing Scalp and Head Structures)

Suradaru, Bala, Tila Taila nourish *Sira, Snayu*, and *Sandhi* of the scalp, improving local tone and resilience. Regular use prevents premature greying and hair fall (as per classical references).

6. Additional Supportive Actions

Renuka, Brihati, Vyaghri, Surabhi – Shothahara, Kapha-Vatahara and *Vedanasthapana* actions maintain scalp health and prevent secondary inflammatory conditions. *Hrivera, Abhaya – Dahashamak* and *Pittahara* reduce excess heat and sweating of the scalp.

Hence, the mechanism of *Anu Taila Nasya* can be understood in two dimensions — the classical *Ayurvedic* view emphasizing *Dosha* pacification, *Srotoshodhana* and follicular nourishment and the modern view highlighting direct neurovascular absorption through the nasal route, improving scalp circulation and follicular vitality.

VII. DISCUSSION

The role of *Anu Taila Nasya* in *Khalitya* can be understood on two levels — preventive and therapeutic. Classical references recommend its seasonal use during *Varsha, Sharad* and *Vasant Ritus* to preserve the vitality of the *Uttamanga* (head and sensory organs) and to prevent premature greying and hair loss. This highlights its value not only as a treatment but also as a routine regimen for maintaining long-term scalp and hair health. Therapeutically, its role becomes more significant when administered after *Shodhana* procedures like *Vamana* and *Virechana* which prepare the body for localized interventions. Through the nasal route, *Anu Taila* acts directly on the cranial region ensuring effective penetration, improved circulation and nourishment of the scalp structures. Its effectiveness is further supported by dual justification. From the *Ayurvedic* perspective, its multi-herbal formulation provides *Tridosha Shamana, Srotoshodhana* and *Rasayana* effects addressing the underlying pathology of *Khalitya*. Modern understanding supports this classical rationale by providing an anatomical basis for intranasal absorption and neurovascular action. Thus, *Anu Taila Nasya* emerges as a comprehensive strategy that serves both as a preventive routine in healthy individuals and as a therapeutic measure in active cases of hair loss. This dual capacity makes it a promising *Ayurvedic* approach for both preventive hair care and therapeutic management of *Khalitya*.

VIII. CONCLUSION

Khalitya is not a life-threatening disease, but its progressive nature and significant cosmetic and psychological implications make it a condition of major clinical concern. Modern management provides symptomatic improvement but often fails to address the underlying pathology. *Ayurveda* offers a more holistic approach focusing on *Dosha* balance, *Srotas* cleansing and *Dhatu Poshana*. Among the various *Shiro Roga* therapies, *Anu Taila Nasya* stands out as an effective intervention, described in the classics for both preventive and therapeutic purposes. Its *Tridosha-shamaka*, *Srotoshodhana* and *Rasayana* properties enable it to pacify *Pitta-Vata* aggravation, clear *Kapha-Rakta* blockages and nourish the *Romakoopa* thereby supporting natural regrowth and maintaining scalp health. From a modern perspective, the nasal route ensures targeted delivery to cranial tissues, improving local circulation and follicular nourishment. In this way, classical *Ayurvedic* wisdom is reinforced by modern anatomical explanation enhancing the scientific credibility of *Anu Taila Nasya*. Overall *Anu Taila Nasya* offers a comprehensive, safe and time-tested strategy for the management of hair loss. Future clinical studies with standardized protocols are essential to validate its efficacy further and to establish its role in integrative dermatology.

REFERENCES

1. Sushruta Samhita Nidan Sthana Ayurvedarahasyadeepika Hindi Vyakhya by Dr. Bhaskar Govind Ghanekar, Nidan Sthana 13/30-31, Pg No. 78, Published by Meharchand Lachhmandas Publications New Delhi, Reprint, March 2006.
2. Vagbhata Ashtanga Hridaya Vidyotini Hindi Commentary by Kaviraj Atrideva Gupta, Uttar Sthana 23/24-28, Pg No. 534-535, Published by Chowkhamba Sanskrit Series Office Varanasi, Fifth Edition.
3. Vagbhata Ashtanga Hridaya Saroj Hindi Vyakhya Sahit by Prof Ravidutt Tripathi, Sutra Sthana 20/4, Pg No. 297 Published by Chowkhamba Pratishthan, Reprint, 2016.
4. Agnivesha, "Charaka Samhita", revised by Charaka and Dridhbala, "Vidyotoni" Hindi commentary, by Pt. Kashinath Shastri and Dr. Gorkha Natha Chaturvedi, Part -1 Sutra Sthana 5/46-48, Pg no. 123, Chaukhambha Bharati Publications, Varanasi-221001, (India), Reprint, 2009.
5. Vagbhata Ashtanga Hridaya Saroj Hindi Vyakhya Sahit by Prof Ravidutt Tripathi, Sutra Sthana 20/14, Pg No. 300, Published by Chowkhamba Pratishthan, Reprint, 2016.
6. Dravyagun Vigyan Prof. P.V. Sharma, Vol – 2, Chapter 9, Pg No. 715-716, Published by Chaukhamba Bharti Academy, Reprint, 2017.

7. The Ayurvedic Pharmacopoeia of India Part – I Volume – IV First Edition Pg No. 4-5.
8. The Ayurvedic Pharmacopoeia of India Part – I Volume – I First Edition Pg No. 115.
9. The Ayurvedic Pharmacopoeia of India Part – I Volume – II First Edition Pg No. 33-34.
10. The Ayurvedic Pharmacopoeia of India Part – I Volume – I First Edition Pg No. 4-5.
11. Dravyagun Vigyan Prof. P.V. Sharma, Vol – 2, Chapter 9, Pg No. 735, Published by Chaukhamba Bharti Academy, Reprint, 2017.
12. The Ayurvedic Pharmacopoeia of India Part – I Volume – I First Edition Pg No. 101.
13. The Ayurvedic Pharmacopoeia of India Part – I Volume – I First Edition Pg No. 123.
14. The Ayurvedic Pharmacopoeia of India Part – I Volume – I First Edition Pg No. 27.
15. The Ayurvedic Pharmacopoeia of India Part – I Volume – III First Edition Pg No. 221-223.
16. The Ayurvedic Pharmacopoeia of India Part – I Volume – I First Edition Pg No. 113.
17. The Ayurvedic Pharmacopoeia of India Part – I Volume – III First Edition Pg No. 129-130.
18. The Ayurvedic Pharmacopoeia of India Part – I Volume – I First Edition Pg No. 107.
19. The Ayurvedic Pharmacopoeia of India Part – I Volume – III First Edition Pg No. 4-5.
20. The Ayurvedic Pharmacopoeia of India Part – I Volume – IV First Edition Pg No. 99-101.
21. The Ayurvedic Pharmacopoeia of India Part – I Volume – IV First Edition Pg No. 23-24.
22. The Ayurvedic Pharmacopoeia of India Part – I Volume – IV First Edition Pg No. 108-109.
23. The Ayurvedic Pharmacopoeia of India Part – I Volume – IV First Edition Pg No. 76-77.
24. The Ayurvedic Pharmacopoeia of India Part – I Volume – II First Edition Pg No. 27-28.
25. The Ayurvedic Pharmacopoeia of India Part – I Volume – I First Edition Pg No. 59.
26. The Ayurvedic Pharmacopoeia of India Part – I Volume – III First Edition Pg No. 162-164.
27. The Ayurvedic Pharmacopoeia of India Part – I Volume – III First Edition Pg No. 81-83.
28. Vagbhata Ashtanga Hridaya Saroj Hindi Vyakhya Sahit by Prof Ravidutt Tripathi, Sutra Sthana 20/3, Pg No. 295 Published by Chowkhamba Pratishthan, Reprint, 2016.
29. Panchkarm Sangrah by Manoj K. Shamkuwar, Chapter 7, Pg No. 281-284 Published by Chaukhamba Prakashak, Varanasi, Third Edition, 2022.