



"A Literary Review On VipadikaKustha: An Ayurvedic Perspective On Etiology, Pathogenesis, And Holistic Management"

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ABSTRACT:

Vipadika Kustha is a subtype of Kshudra Kustha (minor skin disorders) described in Ayurvedic texts, characterized by painful fissures, dryness, and scaling, predominantly affecting the palms and soles. The condition arises due to the vitiation of Vata and Kapha Doshas, coupled with impaired Rasa and Rakta Dhatus, and obstruction of microchannels (Srotas). This review explores the comprehensive Ayurvedic approach to Vipadika Kustha, including its etiology (Nidana), pathogenesis (Samprapti), clinical features (Purvarupa and Rupa), and treatment protocols. Management involves detoxification therapies (Shodhana Karma) like Virechana and Raktamokshana, palliative treatments (Shamana Chikitsa), external applications of Lepa, and dietary and lifestyle modifications (Pathya-Apathya). Emphasis is placed on Nidana Parivarjana (avoiding causative factors) as a preventive strategy. This holistic approach not only addresses the symptoms but also eliminates the root causes, offering a sustainable solution for the effective management of Vipadika Kustha.

Keywords

Vipadika Kustha, Ayurvedic skin disorders, Vata-Kapha imbalance, Shodhana therapy, Raktamokshana, Lepa, Pathya-Apathya, Kustha Chikitsa, Samprapti Ghatak.

INTRODUCTION:

Vipadika Kustha is a chronic skin ailment mentioned in Ayurvedic classics, characterized by painful fissures (vidarika), excessive dryness (rookshata), and scaling, predominantly affecting the palms and soles. It is classified under Kshudra Kustha, a minor type of skin disorder. The pathogenesis of Vipadika involves the vitiation of Vata and Kapha Doshas along with the impairment of Twak (skin), Rakta (blood), and Mamsa Dhatus (muscle tissue). The disease not only causes physical discomfort such as itching (kandu), pain (shoola), and burning sensations (daha) but also affects the individual's psychological well-being and quality of life.

From a clinical perspective, Vipadika may present with symptoms akin to modern dermatological conditions like palmar-plantar keratoderma, fissure eczema, or psoriasis. Ayurvedic texts like Charaka

Samhita and Sushruta Samhita provide detailed insights into its etiology, symptoms, and management strategies, emphasizing holistic treatment.

ETYMOLOGY OF VIPADIKA KUSTHA:

The term Vipadika is derived from the Sanskrit root words:

- Vi meaning "specific" or "severe," and
- Padika referring to "cracks" or "fissures," often occurring on the palms and soles.

Thus, Vipadika denotes a condition characterized by severe fissures and dryness of the skin. It is classified under Kshudra Kustha (minor skin disorders) in Ayurvedic texts, reflecting its localized and less systemic nature compared to major skin conditions.

DEFINATION: -VipadikaKustha is defined in Ayurveda as a condition predominantly affecting the hands and feet, marked by:

- The formation of painful cracks (vidarika),
- Excessive dryness (rookshata),
- Itching (kandu), and
- Burning sensations (daha).

According to Acharya Charaka and Acharya Sushruta, the condition is caused by the vitiation of Vata and Kapha Doshas, which disturb the Twak (skin) and underlying Dhatus (tissues), leading to the characteristic symptoms.

Dosha Dominance in VipadikaKustha According to Various Acharyas

Table no 1:

Acharya	Dosha Dominance	Reference
Charaka	- Vata Dosha (primary): Causes dryness, roughness, and fissures (rookshata and vidarika).	Charaka Samhita, Nidanasthana 5/6
	- Kapha Dosha (secondary): Contributes to stiffness, itching (kandu), and scaling (parushata).	Charaka Samhita, Chikitsasthana 7/58
Sushruta	- Predominantly Vata involvement leading to cracks and pain (shoola).	Sushruta Samhita, Nidanasthana 5/3
	- Kapha aggravation leading to itching and heaviness in the affected area.	Sushruta Samhita, Chikitsasthana 9/3
Vagbhata	- Vata Dosha (dominant): Responsible for fissures, roughness, and dryness.	Ashtanga Hridayam, Nidanasthana 14/20
	- Kapha Dosha: Causes itching, stiffness, and scaling.	Ashtanga Hridayam, Chikitsasthana 19/25-27

Acharya	Dosha Dominance	Reference
Madhav	- Vata Dosha (primary): Fissures and pain.	Madhava Nidana, Kushta Nidana 49/1-5
	- Kapha Dosha (secondary): Itching and scaling of the skin.	Madhava Nidana, Kushta Nidana 49/1-5
Bhavamishra	- Vata Dosha: Causes dryness and cracks.	Bhavaprakasha, Kushta Nidana
	- Kapha Dosha: Responsible for itching and discoloration.	Bhavaprakasha, Kushta Nidana

NIDANA PANCHAKA:

The NidanaPanchaka provides a comprehensive framework to understand the pathogenesis of a disease, comprising:

- Nidana (Etiological Factors):**
The causative factors that lead to the vitiation of Doshas and initiation of the disease.
- Purvarupa (Premonitory Symptoms):**
Early signs indicating the onset of the disease.
- Rupa (Signs and Symptoms):**
The manifested clinical features of the disease.
- Upashaya-Anupashaya (Relieving and Aggravating Factors):**
Factors that alleviate or worsen the condition.
- Samprapti (Pathogenesis):**
The sequential process of disease development.

1. NIDANA:-**Table no 2 Nidana of Vipadika Kustha mentioned in different classical text**

Category	Specific Nidana	Samhita Reference
Ahara Nidana (Dietary Causes)	- Excess consumption of dry and rough foods (rookshaahara).	CharakaSamhita, Sutra Sthana 28/9
	- Overeating sour, salty, and spicy foods (amla, lavana, katu rasa).	CharakaSamhita, Sutra Sthana 25/40
	- Intake of incompatible food combinations (viruddhaahara).	CharakaSamhita, Sutra Sthana 26/84
	Habit of consuming stale and cold food (sheetabhojana).	Ashtanga Hridaya, Sutra Sthana 10/63
Vihara Nidana (Lifestyle Causes)	- Excessive exposure to cold weather (sheetasevana).	Charaka Samhita, Chikitsa Sthana 7/8
	Repeated washing of hands and feet with harsh substances.	Sushruta Samhita, Nidana Sthana 5/13
	Physical overexertion (adhvashrama) and excessive walking.	Charaka Samhita, Vimana Sthana 3/21
Manasika Nidana (Psychological Causes)	Chronic stress and anxiety aggravating Vata Dosha.	Charaka Samhita, Sutra Sthana 1/42
Dosha Nidana (Pathological Causes)	Vitiation of Vata Dosha leading to dryness and cracking (rookshata and vidarana).	Charaka Samhita, Nidana Sthana 5/13
	Aggravation of Kapha Dosha causing stiffness and scaling (sanghata and parushata).	Sushruta Samhita, Sutra Sthana 15/41
Sahaja and Naimittika Nidana	Hereditary predisposition (kulajavikara).	Ashtanga Hridaya, Nidana Sthana 14/10
	Environmental factors like allergens and pollutants exacerbating symptoms.	Sushruta Samhita, Chikitsa Sthana 9/17

D. Anya Nidana**1. Prakruti-specific Causes:**

- Individuals with a predominance of Vata-Kapha Prakruti are naturally predisposed to conditions like Vipadika Kustha due to their inherent rookshata (dryness) and snigdha guru guna (heavy and unctuous qualities), respectively.

2. Ritucharya (Seasonal Factors):

- Shishira Ritu (late winter) and Hemanta Ritu (early winter) aggravate Vata and Kapha Doshas, leading to dryness, stiffness, and skin cracking.
 - Failure to follow proper Ritucharya guidelines, such as oil massage (abhyanga) in winter, predisposes individuals to skin disorders.
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3. Vegadharana (Suppression of Natural Urges):

- Suppressing natural urges such as urination (mutra), defecation (purisha), and yawning (jrumba) causes Vata aggravation, leading to dryness and cracking.
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4. Ativyayama (Excessive Physical Strain):

- Overexertion without adequate hydration or rest exacerbates Vata Dosha, contributing to the development of Vipadika.
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5. AgantujaNidana(External Causes):

- Repeated exposure to external irritants such as harsh soaps, detergents, or allergens.
 - Wearing footwear or clothing that causes friction or reduces ventilation, leading to skin damage.
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6. Karmaja and AdibalaPravritta (Occupational and Genetic Factors):

- Occupations involving excessive manual labor, frequent exposure to water, or use of heavy tools can lead to fissures and scaling of the palms and soles.
 - Familial predisposition or hereditary factors (sahajanidana).
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7. Dhatukshaya (Depletion of Body Tissues):

- Depletion of Rasa Dhatu (nourishment) and Rakta Dhatu (blood) due to chronic illnesses, malnutrition, or improper dietary habits can weaken the skin's integrity, leading to fissures.
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8. Mandagni (Weak Digestive Fire):

- Poor digestion (mandagni) leads to the accumulation of ama (toxins), which obstructs the micro-channels (srotas) of the skin, impairing its health and function.
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9. Psychological Factors:

- Chronic stress, anxiety, and depression contribute to Vata aggravation, leading to dryness and exacerbation of symptoms.

1. POORVARUPA:-

The Purvarupa of Vipadika Kustha includes subtle symptoms indicating the onset of the disease:

1. Dryness of the skin (rookshata): Initial roughness and reduced skin moisture.
2. Itching (kandu): Mild, persistent itching in the palms and soles.
3. Tingling sensation (sphurana): A sensation of pricking or tingling in affected areas.
4. Tightness of skin (tvaksanghata): The skin feels stretched or tight before fissures appear.

2. RUPA

The fully developed symptoms (rupa) of VipadikaKustha are as follows:

1. Cracks or fissures (vidarika): Deep and painful fissures, predominantly on the palms and soles.
2. Severe dryness (rookshata): Extreme dryness of the skin, often resulting in scaling.
3. Pain (shoola): Sharp pain in the cracked areas, especially during movement.
4. Itching (kandu): Persistent and intense itching.
5. Burning sensation (daha): A feeling of heat or burning in the affected areas.
6. Discoloration (varnaparityaga): Darkening or discoloration of the skin in affected areas.

3. UPASHAYA

Upashaya (Relieving Factors):

1. Application of soothing and unctuous substances like medicated oils (sneha) or ghee (ghrita).
2. Use of warm water for bathing or soaking.
3. Consumption of warm, easily digestible, and unctuous foods.
4. Avoidance of cold, dry weather or irritants.
5. Local application of herbal pastes (lepa) or medicated oils such as KaranjaTaila or JatyadiTaila.

4. ANUPASHAYA:

1. Exposure to cold, dry, or windy environments.
2. Use of harsh soaps, detergents, or irritants on the skin.
3. Consumption of dry, cold, or incompatible foods (viruddhaahara).
4. Suppression of natural urges (vegadharana).
5. Excessive manual labor or walking barefoot on rough surfaces.

5.SAMPRAPTI

The development of VipadikaKustha occurs due to the sequential process described below:

1. Nidana (Etiological Factors):
 - Improper diet and lifestyle (rookshaahara, sheetavihara) vitiate Vata and Kapha Doshas.
2. DoshaPrakopa (Aggravation of Doshas):
 - Vata Dosha: Causes excessive dryness, roughness, and cracking of the skin.
 - Kapha Dosha: Leads to stiffness, scaling, and discoloration.
3. DushyaDushti (Involvement of Tissues):
 - Twak (skin), Rasa Dhatu (nutritional fluid), and Rakta Dhatu (blood) become impaired, leading to reduced nourishment and elasticity of the skin.
4. Srotodushti (Obstruction of Channels):
 - The micro-channels (srotas) of the skin are obstructed by ama (toxins) and vitiated doshas, impairing normal skin function.
5. Vyaktavastha (Manifestation):
 - Symptoms such as fissures, pain, and dryness become evident due to the imbalance of Vata and Kapha Doshas in the localized area.

SAMPRAPTI GHATAKA:-

Table no 3: Samprapti Ghatak (Components of Pathogenesis) in VipadikaKustha

Category	Details
Dosha	Vata (dominant) and Kapha (secondary)
Dushya	Twak (skin), Rasa Dhatu (nutritional fluid), RaktaDhatu (blood)
Srotas	RasavahaSrotas (nutritional channels) and RaktavahaSrotas (blood channels)
Srotodushti	Sanga (obstruction) and VimargaGamana (misdirection of flow)
Agni	Mandagni (weakened digestive fire), leading to the formation of Ama (toxins)
Udbhava Sthana	Pakvashaya (colon)
Sanchara Sthana	Rasa Dhatu and Rakta Dhatu
Adhithana	Twak (skin), particularly the palms and soles
Vyaktasthana	Hands and feet, with localized manifestation of symptoms
Rogamarga	BahyaRogamarga (external pathways, affecting the skin)

Dosha Involvement

1. Vata Dosha (Predominant):

- Rooksha (dryness), Khara (roughness), and Vishada (non-unctuous) qualities cause fissures and dryness.
- Aggravation leads to cracking and pain (shoola).

2. Kapha Dosha (Secondary):

- Snigdha (unctuous) and Guru (heavy) qualities contribute to stiffness and scaling.
- Aggravation leads to itching (kandu) and discoloration.

Chikitsa (Management) of Vipadika Kustha

The treatment of Vipadika Kustha is aimed at pacifying Vata and Kapha Doshas, nourishing the skin, and promoting healing. The approach includes:

1. Shodhana Chikitsa (Purification Therapy):

- **Virechana (Purgation):** Removes vitiated Pitta and toxins from the body.
 - Medications: Triphala Churna, Avipattikar Churna.
- **Raktamokshana (Bloodletting):** Indicated in severe cases to purify Rakta Dhatu.

2. Shamana Chikitsa (Palliative Therapy):

- Internal medications:
 - Guggulu preparations (e.g., Kaishore Guggulu, Gandhaka Rasayana).
 - Manjishtha (Rubiocordifolia) for blood purification.
 - Haridra (Curcuma longa) for anti-inflammatory effects.
- External applications:
 - **Medicated oils:** Karanja Taila, Jatyadi Taila for local application to heal cracks.
 - **Lepa (Herbal pastes):** Haridra, Kumari (Aloe vera) for soothing and reducing inflammation.

3. Pathya-Apathya (Dietary and Lifestyle Modifications):

- **Pathya (Do's):**
 - Include warm, unctuous, and easily digestible foods.
 - Regular application of oil (abhyanga) on affected areas to maintain skin moisture.
 - Stay hydrated and avoid excessive exposure to cold or dry environments.
- **Apathya (Don'ts):**
 - Avoid dry, cold, and stale foods.
 - Refrain from using harsh soaps or chemicals on the skin.
 - Avoid suppressing natural urges (vegadharana).

4. Rasayana Therapy (Rejuvenation):

- Chyawanprash or Brahmi Ghrita to improve overall immunity and skin health.

5. Specific Formulations:

- Mahatikta Ghrita: For internal use in cases with dryness and fissures.
- Panchatikta Guggulu Ghrita: Indicated for chronic and recurrent cases.

USE OF LEPA:-Lepa is the name of the medication used externally in the form of a paste

- **Dosha Shamana (Pacification of Doshas):** Specific herbs in the Lepa formulation target the vitiated Doshas (Vata, Pitta, Kapha) contributing to the disease.

- **Shodhana (Cleansing):** Removes impurities and toxins (ama) from the skin and underlying tissues.
- **Ropana (Healing):** Enhances tissue repair, promoting wound healing and regeneration.
- **Varnya(Skin Brightening):** Improves skin tone and reduces discoloration.

➤ **NIDANA PARIVARJANA:**

Table no: 4

Category	Specific Avoidances
Dietary (Ahara Nidana)	Avoid dry, rough, cold, sour, salty, spicy, and incompatible foods (rooksha, sheeta, viruddhaahara).
Lifestyle (Vihara Nidana)	Avoid harsh weather exposure, overexertion, and repeated washing with harsh chemicals.
Psychological Factors	Avoid stress, anxiety, and irregular sleeping patterns.
Unwholesome Practices	Avoid neglecting skincare, skipping moisturization, or wearing tight, synthetic footwear.
Seasonal Factors	Avoid improper adaptation to cold, dry seasons by skipping abhyanga or consuming unwholesome foods.

6. **PATHYA – APATHYA: xxxii**

Table no 5:Pathya-Apathya Table

Category	Pathya (Wholesome)	Apathya (Unwholesome)
Ahara (Dietary)	Warm, unctuous, and easily digestible foods (snigdha, ushna ahara).	Dry, rough, and cold foods (rooksha, sheeta ahara) like crackers, popcorn, and refrigerated items.
	Milk, ghee, butter, and sesame seeds (tila), which provide nourishment and lubrication.	Sour, spicy, and salty foods (amla, katu, lavana rasa), such as pickles, fried snacks, and junk foods.
	Freshly prepared soups made of green gram (mudga), barley, or wheat.	Stale or preserved foods (purana anna), processed or packaged foods.
	Vegetables like pumpkin, bottle gourd, and Indian gooseberry (amla).	Overconsumption of bitter or astringent-tasting foods.
	- Herbal teas with ginger, turmeric, or licorice (mulethi).	ViruddhaAhara (incompatible foods) such as milk with fish or sour fruits with milk.
	Warm water or medicated water	Excessive caffeine, carbonated

	(ushnodaka) for drinking.	drinks, or alcohol.
Vihara (Lifestyle)	-Regular oil massage (abhyanga) with medicated oils like Tila Taila or Karanja Taila to maintain skin moisture.	Frequent washing of hands and feet with harsh soaps or detergents that dry out the skin.
	Protecting the skin from exposure to cold, dry, or windy climates.	- Prolonged exposure to cold environments without adequate protection.
	- Wearing comfortable, breathable footwear to avoid pressure on fissures.	- Wearing tight, synthetic, or non-breathable footwear.
	- Following a regular sleep schedule (nidra), ensuring adequate rest.	- Suppression of natural urges (vegadharana) like urination or defecation.
	- Consuming meals at regular intervals and practicing mindful eating.	- Irregular meal timings or skipping meals.
	- Practicing stress-relieving activities like yoga and meditation.	- Excessive physical strain, prolonged walking, or running barefoot on hard surfaces.
	- Bathing with lukewarm water and using mild soaps.	- Using excessively hot or cold water for bathing.

DISCUSSION:-

In Ayurveda, the management of VipadikaKustha (a type of skin disease characterized by fissures, dryness, and cracking of palms and soles) involves a holistic approach that includes Shodhana Karma (detoxification therapies), ShamanaChikitsa (palliative treatments), dietary modifications (Ahara), lifestyle changes (Vihara), and the application of external therapies like Lepa. VipadikaKustha is a subtype of KshudraKustha in Ayurveda, primarily caused by the vitiation of Vata and Kapha Doshas. It manifests as painful fissures, excessive dryness, and cracking of the palms and soles, accompanied by symptoms like itching (kandu), burning sensation (daha), and discoloration. The condition can significantly impair daily activities and quality of life.

Etiology (Nidana): Factors such as consumption of rooksha (dry) and sheeta (cold) foods, exposure to cold and dry climates, suppression of natural urges (vegadharana), and stress contribute to the aggravation of Vata and Kapha. These factors impair the skin (Twak), Rasa, and RaktaDhatus, leading to the characteristic symptoms.

Pathogenesis (Samprapti): The interplay of Vata's dryness and Kapha's stiffness results in fissures and scaling. Obstruction of skin channels (Srotorodha) by ama further worsens the condition.

Management:

1. **Shodhana (Purification):** Therapies like Virechana (purgation) and Raktamokshana (bloodletting) eliminate toxins and vitiated doshas. Basti (medicated enema) is effective for chronic cases due to its Vata-balancing properties.
2. **Shamana (Pacification):** Medications like KaishoreGuggulu and GandhakaRasayana are used for symptom relief. External applications of SarjarasaLepa and DhatubeejTaila promote healing of fissures and reduce dryness.
3. **Ahara-Vihara (Diet & Lifestyle):** A warm, moist, and nourishing diet with regular Abhyanga (oil massage) and protection from cold weather are vital in managing VipadikaKustha.

CONCLUSION

The Ayurvedic management of VipadikaKustha is a comprehensive approach that includes:

1. Shodhana therapies to eliminate vitiated Doshas.
2. Shamana treatments to pacify symptoms and promote healing.
3. Strict adherence to Pathya-Apathya in both diet and lifestyle.
4. Regular use of medicated Lepas to heal fissures, reduce dryness, and prevent recurrence.

REFERENCES

1. Vagbhata. AshtangaHridayam: Nidanasthana, Kushta-Nidana 14/20. Nirmala Hindi Commentary by Dr. Brahmanand Tripathi. Delhi: Chaukhambha Sanskrit Pratishthan; 2011. p. 528.
2. Agnivesha. CharakaSamhita: Nidanasthana, KushtaNidana 5/6. Vidyotini Hindi Commentary by Pt. KashinathaShastri&Dr. Gorakhanatha Chaturvedi. Vol. 1. Varanasi: ChaukhambhaBharati Academy; 2005. p. 643.
3. Sushruta. SushrutaSamhita: Nidanasthana, Kushtanidana 5/3. p. 319.
4. Vagbhata. AshtangaHridayam: Chikitsasthana, Kushtachikitsa 19/25-27. Nirmala Hindi Commentary by Dr. Brahmanand Tripathi. Delhi: Chaukhambha Sanskrit Pratishthan; 2011. p. 530.
5. Madhavakara. MadhavaNidana: Uttarardha, KushtaNidana 49/1-5. Vidyotini Hindi Commentary by Prof. YadunandanaUpadhyaya. Varanasi: ChaukhambhaPrakashan; 2007. p. 153.
6. Agnivesha. CharakaSamhita: Chikitsasthana, Kushtachikitsa 7/58. Vidyotini Hindi Commentary by Pt. KashinathaShastri&Dr. Gorakhanatha Chaturvedi. Vol. 1. Varanasi: ChaukhambhaBharati Academy; 2005. p. 726.
7. Sushruta. SushrutaSamhita: Chikitsasthana, Kushtachikitsa 9/3. Ayurveda TattvaSandipika by Dr.AmbikaduttaShastri. Vol. 2. Varanasi: Chaukhambha Sanskrit Sansthan; 2010. p. 62.
8. Vagbhata. AshtangaHridayam: Chikitsasthana, Kushtachikitsa 19/25-27. Nirmala Hindi Commentary by Dr. Brahmanand Tripathi. Delhi: Chaukhambha Sanskrit Pratishthan; 2011. p. 527.

9. WHO. Epidemiology and Management of Common Skin Diseases in Children in Developing Countries. Geneva: World Health Organization; 2005. WHO/FCH/CAH/05.12.
10. Lunawat SR, Sabu NR. Ayurvedic Approach in Fungal Infections of Skin. WJPR. 2016; 5(4):1757-62.
11. Jameson JL. Harrison's Principles of Internal Medicine. 20th ed. McGraw-Hill Education; 2018. p. 335-36.
12. Madhavakara. MadhavaNidana: KushtaNidana 5/8. Vidyotini Hindi Commentary by Prof. YadunandanaUpadhyaya. Varanasi: ChaukhambhaPrakashan; 2007. p. 153.
13. Agnivesha. CharakaSamhita: VimanaSthana 7/11. Vidyotini Hindi Commentary by Pt. KashinathaShastri&Dr. Gorakhanatha Chaturvedi. Vol. 1. Varanasi: ChaukhambhaBharati Academy; 2005. p. 726.
14. Sushruta. SushrutaSamhita: Uttarantra, Kushtanidana 1/25. Ayurveda TattvaSandipika by Dr.AmbikaduttaShastri. Vol. 2. Varanasi: Chaukhambha Sanskrit Sansthan; 2010. p. 14.
15. Vagbhata. AshtangaHridayam: Nidanasthana, Kushta-Nidana 14/1-2. Nirmala Hindi Commentary by Dr. Brahmanand Tripathi. Delhi: Chaukhambha Sanskrit Pratishthan; 2011. p. 527.
16. Charaka Samhita. Chikitsasthana: Arshachikitsa 14/179. Vidyotini Hindi Commentary by Pt. KashinathaShastri. Varanasi: ChaukhambhaBharati Academy; 2004. p. 440.
17. Sushruta. SushrutaSamhita: Chikitsasthana, Kushtachikitsa 7/82-83. Varanasi: Chaukhambha Sanskrit Sansthan; 2010. p. 262.
18. Bhavamishra. BhavaprakashaNighantu: HaridraadiVarga 14/48. Varanasi: ChaukhambhaBharati Academy; 2005. p. 334.
19. Vagbhata. AshtangaHridayam: Chikitsasthana, Kushtachikitsa 19/15-17. Nirmala Hindi Commentary by Dr. Brahmanand Tripathi. Delhi: Chaukhambha Sanskrit Pratishthan; 2011. p. 525.
20. Lunawat SR, Sabu NR. Ayurvedic Approach in Fungal Infections of Skin. World Journal of Pharmaceutical Research (WJPR). 2016; 5(4):1757-62.
21. Ayurvedic Formulary of India (AFI). Part 1, Section on KushtaChikitsa. Ministry of AYUSH, Government of India; 2010.
22. Sharma PV. DravyagunaVijnana: Properties of Sarjarasa and Neem. Varanasi: ChaukhambhaBharati Academy; 2008.