Comparative Study on the Efficacy of Vipadika Hara Ghrita and Taila Prepared with Go Ksheera and Arka Ksheera in the Management of Vipadika Kushta: A Case Study

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INTRODUCTION:

Skin plays a vital role in a person’s overall well-being, serving as a protective barrier against external factors which in turn contributes to our physical, emotional comfort and attractive personality of a human being. Besides, healthy skin represents healthy gut and sound inner atmosphere of the body. However, for individuals with psoriasis, maintaining healthy skin becomes a constant challenge. Palmo-plantar psoriasis, a form of psoriasis, is a chronic auto-immune disorder that primarily affects palms and soles of the person. The prevalence of skin diseases in the general population in different geographic regions of India varies from 7.9% to 60%. Among them Palmo-plantar Psoriasis varies in different studies, between 2.8% to 40.9%. The most prevalent type of Palmo-plantar psoriasis expresses morphologic patterns like thick hyperkeratotic plaques in palms and soles or both associated with pain, itching, and burning sensation. Even though the affected area is smaller, the quality-of-life impairment seems more in Palmo-plantar psoriasis patients, especially people with psoriasis on palms. People feel embarrassment in shaking hands at social gatherings, finds pain and difficulty while walking, causing social and functional disability. It significantly affects an individual’s self-esteem and mental well-being. In the contemporary science, treatment options for Palmo-plantar psoriasis include symptomatic management with topical cortico-steroids, vitamin-D analogues and in more severe cases, systematic medications like oral retinoids, Immune modulators like methotrexate, etc may be prescribed.

Based upon these symptoms, Palmo-plantar Psoriasis can be correlated with Vipadika kushta, a Vata-Kapha disorder, which has symptoms like pain or pani pada sphutanam (cracks in palms and soles), teevra Vedana (severe pain) 2, kandu (itching) and daha (burning sensation) 3. Vata-rakta is a disease condition mentioned by Charaka 4 and Susrutha 5, which is of two types, Uttana (superficial) and Gambhira (deep seated). According to Susrutha, just like Kushta, Vata rakta in the beginning remains superficial (uttana) and during the course of time it becomes deep seated (gambhira). Symptoms of Uttana Vata rakta resembles Kushta roga that includes Vipadika kushta roga that includes Vipadika Kushta that can be correlated with Palmo-plantar psoriasis.

OBJECTIVE: In Ayurveda, majority of skin diseases are dealt under broader term Kushta. As per acharya Charaka, Vipadika kushta is classified under Kshudra kushta. This can be correlated with Palmo-plantar psoriasis, which mainly affects palms and soles of a person causing cracks associated with severe pain, itching, discolouration and burning sensation. In the present study, an effort is made to compare clinical efficacy of Vipadikahara ghrita and taila prepared using go ksheera and arka ksheera in two different batches for the treatment of Vipadika kushta.

INTERVENTION: Vipadikahara ghrita & taila is a yamaka preparation that is mentioned in both charaka samhitha and Susrutha commentary by Kaviraj Athridesa Gupta, usage of arka ksheera is mentioned. As specific ksheera is not mentioned in Charaka samhitha, go ksheera is taken and its effect is compared with the arka ksheera. Vipadikahara ghrita & taila is administered externally for 15 days and changes are noted. Results: Vipadikahara ghrita & taila prepared with go ksheera helped in reducing only pain, whereas that prepared with arka ksheera reduced pain, itching, discolouration and size of the lesion. Conclusion: Hence it can be said that arka ksheera is found to be more effective in the present case study.

Keywords: Vipadika kushta, Vipadika hara ghrita & taila, Go ksheera, Arka ksheera, Palmo-plantar Psoriasis.
management of Vipadika Kushta can also be done considering Uttana Vata rakta. Kushta is a broader term that encompasses most of the skin diseases under it. Kushta is defined as “Kushnati tad vapuhu” which means roga which causes discolouration and disfiguration, by the vitiation of seven dushyas like tridoshas and twak, rakta, mamsa and lasika. It is classified into 18 types based on severity like Maha kushta (7) and Kshudra kushta (11)9. Here the term Maha indicates “Major” and Kshudra indicates “Minor.” Though Vipadika kushta is mentioned one among the Kshudra kushta - a minor condition, now-a-days treating kshudra kushta became difficult due to its chronicity as patients’ approach Ayurveda after many years of occurrence of the condition, taking various other contemporary medical treatments. In treatment of Kushta, sthanika chikitsa like lepa, udvartana, pariseka and abhyanga, etc are specifically mentioned, after sodhana and samana as it provides more significant effect locally6. Vipadika hara ghrita & taila is a such formulation cited in both Charaka Samhita9 and Ashtanga Hridaya10 that consists of about ten ingredients like Jeevanthi, Manjistha, Daruharidra, Kampillaka, Ksheera, Tuttha, Ghipta, Taila, Sarjarasa and Madhuchista. In Charaka samhitha, as particular Ksheera to be taken is not specified Go ksheera is taken and as per Kaviraj Athirdeva Gupta commentary on Ashtanga Hridaya11, Arka ksheera is taken to prepare Vipadika hara ghrita & taila in two different batches following Sneha kalpana vidhi and their clinical efficacy is compared in treating a patient of Vipadika kushta respectively.

MATERIALS AND METHODS:

Vipadika hara ghrita & taila is prepared following the classical reference mentioned in Sneha Kalpana Adhyaya of Sarangadharaa Samhitha Madhyama khandaa12.

Collection of Raw material:

Jeevanthi, Manjistha, Daruharidra, Kampillaka, Tuttha, Sarjarasa, Madhuchista, Ghipta (go ghrita), Taila (tila taila) and Ksheera (cow milk) were obtained from local market, Hyderabad. Arka ksheera is obtained from local vendor, Nellore district, Andhra Pradesh.

Method:

Entire preparation of Vipadikahara ghrita & taila was carried out in department of Rasa Shastra and Bhaishajya Kalpana, Dr. B.R.K.R. Govt Ayurvedic College, Hyderabad.

Ingredients:

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Name of the ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Jeevanthi</td>
<td>16gm</td>
</tr>
<tr>
<td>2.</td>
<td>Manjistha</td>
<td>16gm</td>
</tr>
<tr>
<td>3.</td>
<td>Daruharidra</td>
<td>16gm</td>
</tr>
<tr>
<td>4.</td>
<td>Kampillaka</td>
<td>16gm</td>
</tr>
<tr>
<td>5.</td>
<td>Ghrita (go ghrita)</td>
<td>125 ml</td>
</tr>
<tr>
<td>6.</td>
<td>Taila (tila taila)</td>
<td>125ml</td>
</tr>
<tr>
<td>7.</td>
<td>Ksheera (go ksheera / arka ksheera)</td>
<td>1 litre</td>
</tr>
<tr>
<td>8.</td>
<td>Tuttha</td>
<td>16gm</td>
</tr>
<tr>
<td>9.</td>
<td>Sarjarasa</td>
<td>16gm</td>
</tr>
<tr>
<td>10.</td>
<td>Madhuchista</td>
<td>16gm</td>
</tr>
</tbody>
</table>

Preparation: Entire preparation is carried out in following stages:

Stage 1:
- Preparation of fine powder (sukshma churna) of Jeevanthi, Manjistha, Daruharidra and Kampillaka.

Stage 2:
- Preparation of kalka by mixing churnas with sufficient quantity of ksheera.

Note: Hereby ksheera indicates both arka ksheera and go ksheera used in the preparation of vipadika hara ghrita & taila in two different methods.

Stage 3:
- Preparation of oil with ratio of 1:4:16 (kalka: taila: ksheera) till it attains kara paka consistency.

Stage 4:
- Obtained oil is filtered through a double layered cloth.

Stage 5:
- Madhuchista and Sarjarasa are added to the obtained oil, heated on mild flame till a homogenous consistency is obtained.

Stage 6:
- Finely powdered Tuttha is added to the oil and bhavana is continued till a homogenous mixture is obtained. This mixture is kept aside for self-cooling.

Procedure:

Churnas of Jeevanthi, Manjistha, Daruharidra and Kampillaka are mixed with required amount of ksheera and kalka is prepared. To this kalka dravya, oil and ghee are added as Sneha dravya and ksheera as Drava Dravya in prescribed quantities. This entire mixture is subjected to mild heat till it attains kara paka consistency. Sneha siddhi lakshanas are checked and confirmed, then the oil is filtered through a double layered cloth. This obtained oil is added with Madhuchista and Sarjarasa, heated and stirred well, till they are completely melted and filtered again to remove any impurities present in them. This mixture is transferred to a khalwa yantra and bhavana is done by adding finely powdered tuttha till it attains homogeneity. Then it is kept for self-cooling, the resultant semisolid product obtained is Vipadikahara ghrita & taila.

CASE STUDY:

A patient aged 55years/male, complains of cracks in soles associated with pain, itching, burning sensation, discolouration and difficulty while walking since 5 years. He used allopathy medication for 2 to 3 years and felt mild relief. Later the condition recurred on stoppage of medication. So, he visited Dr BRKR GAC, for the same complaint. After complete history taking, he is diagnosed to have Vipadika Kushta.

Vipadikahara ghrita & taila (Go ksheera) is administered externally for 15 days twice a day (morning after bath & evening during bed time) and follow up is done after 15 days. Patient found only mild relief in pain, but no significant change is found in symptoms like itching, burning sensation and discolouration.

For the next 15 days Vipadikahara ghrita & taila (Arka ksheera) is administered in the same way and advised for follow up. After 15 days, patient reported that significant changes are observed in itching, burning sensation, discolouration, and reduction in size of the lesion. So, the preparation of Arka ksheera is advised to continue till the condition is completely cured.
### DISCUSSION:

In Ayurveda, Kushta is considered as one among the Ashta Mahagadas in classics. Vipadika Kushta is mentioned as one among the eleven Kshudra kushta. It is called as Vipadika which means “Cracks on the skin.” Kushta is said to manifest in the body due to various nidanas like viruddhahara sevana, apathyahara and vihara, manasika bhavas, santarpanothha vilaka, as a sankramika roga and indulging in sinful acts etc.13 Due to indulgence in various nidanas, agni gets deranged which causes Mandagni (vitiated digestive fire) and leads to the formation of Ama and further causing imbalance in Tridoshas mainly with the predominance of Vata and Kapha and few other kushta contain Kapha and Pitta predominance.

All types of Kushtas are Tridosha and none of them is produced by single dosha. Vipadika kushta is one such kushta with Vata-Kapha predominance. The vitiated doshas gets localised in Twak, Rakta, Mamsa of hasta (palms) and pada (soles) and produce’s lesions. Vata due to its khar and ruksha guna causes symptoms like Sphutana (cracks) and Teevra Vedana (severe pain). Kapha by its snigdha and guru guna causes Kandu (severe itching) and thickness of the skin. Because of sphutana, skin cracks open exposing to external environment causing daha (burning sensation). This involvement of Vata and rakta in kushta samprapti (pathogenesis) can be compared with Uttana Vata Rakta symptoms resembling Kushta. Vipadika kushta by its symptoms resembles with Palmo-plantar Psoriasis of modern science. Palmo-plantar Psoriasis is an auto-immune disorder and a genetic condition that runs in families. It can get triggered by any trauma or injury (Koebner’s phenomenon)14, psychological stress and gets aggravated during cold and dry seasons. In recent years there is an increased usage of hand sanitisers and hand washing liquids on regular basis that contains alcohol which makes the skin dry on surfaces of palmar areas, making the skin more prone to xerosis, and cracks leading to further onset of the disease Palmo-plantar psoriasis.

In the management of Kushta and Vata rakta, agni plays an important role. If there is an involvement of Kapha and vata, underlying Kapha needs to be first taken care of, then Vata needs to be pacified. Hence Ama condition needs to ruled out and basing on which Vata hara or Kapha hara chikitsa is chosen accordingly, which in turn corrects the dushta twak, rakta, mamsa and lasika. While treating a patient with Kushta, physician should also focus on the patient’s psychological health as most of the skin condition comes under the umbrella of psycho-somatic diseases. “All diseases begin in the gut” -

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<table>
<thead>
<tr>
<th>VAIPADIKAHARA GHRITA &amp; TAILA (Go ksheera)</th>
<th>VAIPADIKAHARA GHRITA &amp; TAILA (Arka ksheera)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dosage: BD, quantity sufficient on both affected areas of plantar region (soles)</td>
<td>Dosage: BD, quantity sufficient on both affected areas of plantar region (soles)</td>
</tr>
<tr>
<td>Duration: 15 days</td>
<td>Duration: 15 days</td>
</tr>
<tr>
<td>Follow Up: 15 days</td>
<td>Follow Up: 15 days</td>
</tr>
</tbody>
</table>

Before and after pictures of condition after using Vaipadikahara ghrita & taila (Go ksheera and Arka ksheera) are enclosed respectively.

Before treatment:  
After administration of Vipadikahara ghrita & taila (Go ksheera):  
After administration of Vipadikahara ghrita & taila (Arka ksheera)
Hippocrates of Kos\textsuperscript{15}, this statement was made by Greek physician Hippocrates, regarded as the father of modern medicine. The gut-brain axis is a bidirectional network between enteric and central nervous systems\textsuperscript{16}. The impact of which extends to endocrine, humoral, metabolic, and immune routes of communication as well. As per ayurveda, the digestion, metabolism and assimilation of nutrients is controlled and regulated by Agni. Negative Psychological states like chinta, shoka, lobha, bhaya, krodha, dwesha, irsha\textsuperscript{17} etc., have bidirectional impact on the body and particularly with the agni which in turn causes the imbalance leading to the pathology. Hence in the current scenario, there is a need to study Palmo-plantar psoriasis that can be correlated with Vipadika Kushta to meet the patient needs. The treatment principle initially includes Ama pachana and langhana karma which extends to endocrine, humoral and immune systems and plays a preventive role in further progression of a disease condition.

<table>
<thead>
<tr>
<th>S.N.</th>
<th>INGREDIENTS</th>
<th>RASA</th>
<th>GUNA</th>
<th>VEERIA</th>
<th>VIPAKA</th>
<th>KARMA</th>
<th>RESEARCH WORKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Jeevanthi\textsuperscript{20}</td>
<td>Madhura</td>
<td>Laghu, snigdha</td>
<td>Sita</td>
<td>Madhura</td>
<td>Balya, rasayana, grahi, chalsusya, vatapitta hara</td>
<td>Anti-fungal Anti-oxidant</td>
</tr>
<tr>
<td>2.</td>
<td>Manjista\textsuperscript{21}</td>
<td>Madhura, tikta</td>
<td>Guru, Ruksa</td>
<td>Usna</td>
<td>Katu</td>
<td>Kapha-Pitta hara, varnya, visagha</td>
<td>Anti-inflammatory Anti-microbial</td>
</tr>
<tr>
<td>3.</td>
<td>Darvi\textsuperscript{22}</td>
<td>Tikta, kasaya</td>
<td>Laghu, ruksa</td>
<td>Usna</td>
<td>Katu</td>
<td>Kaphapitta hara, chedana</td>
<td>Analgesic Anti-inflammatory Anti-microbial</td>
</tr>
<tr>
<td>4.</td>
<td>Kampillaka\textsuperscript{23}</td>
<td>Katu</td>
<td>Laghu, Ruksa, Tikshna</td>
<td>Usna</td>
<td>Katu</td>
<td>Kaphavata hara, krimigh na, rechaka</td>
<td>Anti-fungal Anti-oxidant</td>
</tr>
<tr>
<td>5.</td>
<td>Sarja rasa\textsuperscript{24}</td>
<td>Kasaya, tikta</td>
<td>snigdha</td>
<td>Sita</td>
<td>Katu</td>
<td>Vatapitta hara, kand uguna, kushagha</td>
<td>Anti-tumour effect Healing property</td>
</tr>
<tr>
<td>6.</td>
<td>Tuttha\textsuperscript{25} (CuSO4 5H2O)</td>
<td>Kasaya, madhura</td>
<td>Laghu</td>
<td>Kaphapitta hara, lekhdha, bhedi, krimigna, chaksuslya, balya, rasayana</td>
<td>Krimigna, rechaka</td>
<td>Anti-inflammatory Anti-microbial</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Go ksheera\textsuperscript{26}</td>
<td>Madhura</td>
<td>Snigdhaguru</td>
<td>Sita</td>
<td>Madhura</td>
<td>Vata-pitta hara, dhatu vardanam, ojasya, vrsya, jeevaniya</td>
<td>Anti-oxidant Rejuvenative</td>
</tr>
<tr>
<td>8.</td>
<td>Arka ksheera\textsuperscript{27}</td>
<td>Tikta, katu</td>
<td>Tikshnalaghu, sara, snigdha</td>
<td>Ushna</td>
<td>Katu</td>
<td>Vata-kapha hara, kushta hara, kand uguna</td>
<td>Analgesic Anti-tumour Anti-microbial Anti-helminthic Anti-oxidant</td>
</tr>
<tr>
<td>9.</td>
<td>Ghrita\textsuperscript{28}</td>
<td>Madhura</td>
<td>Snigdha, guru</td>
<td>Sita</td>
<td>Madhura</td>
<td>Vata-pitta hara, dhatu poshaka, balavardhaka, deepana, ayu vārdhaka</td>
<td>Anti-bacterial Anti-fungal Anti-viral Anti-oxidant</td>
</tr>
<tr>
<td>10.</td>
<td>Tila taila\textsuperscript{29}</td>
<td>Madhura, Tikta</td>
<td>Guru, sara, vikasi, vishada, vyavayi, suksma, teelshna</td>
<td>Usna</td>
<td>Madhura</td>
<td>Vata-kapha hara, deepana, tvachya, balakara, vaya thaphana, medhakara</td>
<td>Anti-microbial Anti-oxidant</td>
</tr>
<tr>
<td>11.</td>
<td>Madhuchista\textsuperscript{30}</td>
<td>Madhura</td>
<td>Sita</td>
<td>Madhura</td>
<td>Kushtagna</td>
<td></td>
<td>Anti-microbial</td>
</tr>
</tbody>
</table>
Basing on the above properties of individual drugs, we can analyse and understand how Vipadikahara ghrita & taila might have helped in reducing the pain, healing the skin, reducing the itching, discoloration and promoting the formation of fresh skin. As both Vata & Kapha doshas plays a prominent role in causing the disease pathogenesis of Vipadika Kushta, there is a need to correct both the doshas simultaneously. By using Go ksheera, being vata-pitta hara and kapha kara Dravya, it might have worked solely on vitiated vata and pitta hence reducing the pain and dryness and no significant change is seen in kandu (itching) and sphenata (cracking) which are kapha doshya yudha rupas. Whereas Arka ksheera, which is a vata-kapha hara Dravya with gunas like Tilkshe, ushna and laghu it might have simultaneously regulated the vitiated vata and kapha by its penetrating capacity. Hence symptoms like itching, cracks and size of the lesion might have reduced due to its effect, when Vipadika hara ghrita & taila prepared with Arka ksheera is used. Based on the above comparative study between the two yogas, it is understood that both the preparation has its own effects. Depending upon the condition, involvement of doshas like kapha, Vata, ama and patient's symptoms the appropriate Dravya should be chosen accordingly. In the present case Vipadikahara ghrita & taila prepared with Arka ksheera proved to be more effective as there was more involvement of kapha in the pathology.

CONCLUSION:
From the above study, it is observed that yoga prepared with Arka ksheera worked more efficiently when compared with Go ksheera based on its properties. As the study is done only in a single case, more relevant conclusions cannot be drawn from this. If studied on a greater number of cases better conclusions can be drawn accurately. The same Vipadikahara ghrita & taila is available as Jeevantadhya Yamakam prepared by certain pharmaceutical companies in the market. Some pharmacies are using Go ksheera and some are using Arka ksheera in the preparation. A Practitioner should also be aware of these factors and must consider while prescribing the medication. Hence, this current study is conducted to throw light on to understand the impact of both the Yogas and their preparation methods.

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