An Ayurvedic Approach to Vipadika (Palmoplantar Psoriasis): A Case Study

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Authors’ contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

ABSTRACT

Ayurveda includes all the skin diseases under the broad name Kushta (Skin Diseases). There are 18 types of skin diseases were described in Ayurveda Samhitas. Out of which 11 are Kshudra Kushta. Vipadika (Palmoplantar psoriasis) is one of them. Different Acharyas have given different presentations of signs and symptoms of Vipadika. According to Ashtang hridaya, Panipadsputana (Cracks over palms and soles), Tivra Vedana (severe Pain), Manda Kandu (Mild Itching), and Sarag Pidika (Red-colored Macule) are the symptoms of Vipadika. This skin disease hampers day-to-day activity and depresses patients because of cosmetic issues. This case was about a woman of age 55 years having Itching on the plantar aspect of both feet, cracks over soles, burning sensation, and pain during walking. There was no previous history of any systemic disease. The patient had not undergone any surgical procedure. The patient used to eat pickles twice a day on daily basis. At the first follow-up, the burning sensation was reduced. Then the cracks, itching, and
Keywords: Kusha; macule; palmoplantar psoriasis; vipadika.

1. INTRODUCTION

Skin diseases are considered nonserious type diseases. The seriousness and awkwardness can only be felt by the sufferer. In this era, the presentation has got enormous importance. Thus, Skin is the first thing observed by others. Skin diseases are not responsible for Mortality but the cosmetical issue affects the patient at the mental level. Researches show that the patient with skin diseases had greater impairment in mental health as compared with patients having Diabetes mellitus, Hypertension, Asthma, joint pain, Epilepsy, etc. Billions of money are spent on the cosmetical issue every year. Ayurveda includes all the skin diseases under the broad name Kusha. There are 18 types of Kusha described in Ayurved Samhitas [1]. Out of which 11 are Kshudra Kusha. Vipadika is one of them. Different Acharyas have given the different presentations of signs and symptoms of Vipadika. According to Ashtang hridaya, Panipadspatana (Cracks over palms and soles), Tvra Vedana (Intense pain), Manda Kandu (Mild itching), and Sarag Pidika (Red-colored macules) are the symptoms of Vipadika [2]. According to Acharya Charak crack and severe pain are the symptoms of Vipadika [3]. According to Sushrutchacharya, Itching, Burning sensation, Pain present especially on pada (sole) are the symptoms of Vipadika [4]. Critics of Sushruta have told Padadari (cracks over soles) and Vipadika are the same. In Vipadika there is the involvement of Tridosha (basic constitution) but Vata is predominantly vitiated [5]. This case is about 55 year’s old lady with Vipadika. There was no previous history of any systemic disease and Surgeries. The patient was good before 2 years. After that, she had cracks, Burning sensation, Pain, and reddish macules over her palms. But these symptoms got subsided after taking medicines from allopathy and Homeopathy. She didn’t know which treatment gave her results. Before 1 year she had the same symptoms on both plantar aspects of the foot. She had consulted for various treatments available but of no use.

In this case, Leach therapy and Ayurvedic medication from Ayurved texts was prescribed to break the pathogenesis. As texted, Kusha Dirgharoganam, the treatment was given for 3 months. [6]

2. CASE PRESENTATION

Patient information: A 55-year-old lady came to OPD of Dirghayu Ayurved Chikitsalay and Panchkarma centre, Ramnagar, Wardha from post-Arvi with the following chief complaints. The patient had cracks on both the soles for 1 year. A burning sensation for 1 year, Itching from 1 year, the patient had Insomnia due to itching from 7 – 8 months. Pain during walking from 3 months, and Constipation since 2-3 months

History of present illness: The patient came to OPD with all of the above symptoms. She did not have any systemic disease.

Clinical findings: The patient was examined based on Dashvidh Pariksha (Ten examinations), which includes Nadi (Pulse), Mala (Stool), Mutra (Urine), Jivha (Tongue), Shabda (Speech), Sparsha (Skin), Dreek (Eyes), Akruti (Built), Agni (Digestion), Bala (Power). Table: 1.

Subjective criteria: The patient was tested on subjective which includes Vedana (Pain), Kandu (Itching), and Daha (Burning sensation) [Table: 2], and in objective criteria, Padshutana (cracks) is observed Table:-3.

Differential Diagnosis: Palmoplantar psoriasis, Tylosis (Palmoplantarkeratoderm), and Dermatitis are the diseases that have the same pictures in the patient and get confused during the treatment. [7] While treating the diseases it is important to find out the difference between these diseases Table 4, which is useful for the further line of treatment

Treatment: Treatment was given in two ways internal medication which includes Hingwadi vati, Arogyavardhini vati, Aragwadhakapilia, Gandhak rasayan, Raktapachak kadha and Local application Karanj tail is used along with the leech therapy. Each Follow up was plan after 15 days to analyzed the subjective and objective criteria after For the first 30 days line of treatment is different Table 5.

| Pain during walking reduced with consecutive follow-ups. | Raktmokshan (Leech therapy) was planned after every 15 days. Total treatment was about 3 months with a follow-up of 15 days. With this treatment protocol, the patient got completely relieved from all parameters. |
Table 1. Dashvidh Pariksha (Ten examinations)

| Sr. No | Examination      | Result                        |
|--------|------------------|-------------------------------|
| 1      | Nadi (Pulse)     | 88/ min                       |
| 2      | Mala (Stool)     | Constipated – 3-4 in a week   |
| 3      | Mutra (Urine)    | Normal                        |
| 4      | Jivha (Tongue)   | Coated                        |
| 5      | Shabda (Speech)  | Normal                        |
| 6      | Sparsha (Skin)   | Ruksh (Dry)                   |
| 7      | Dreek (Eyes)     | Normal                        |
| 8      | Akruti (Built)   | Madhyam (Medium)              |
| 9      | Agni (Digestion) | Visham (Irregular)            |
| 10     | Bala (Power)     | Madhyam (Medium)              |

Table 2. Subjective criteria

| Sr. No | Criteria        | Grade | Symptoms                              |
|--------|-----------------|-------|---------------------------------------|
| 1      | Vedana (Pain)   | 0     | No Pain                               |
| 2      | Kandu (Itching) | 0     | No Itching                            |
|        |                 | 1     | Pain after Pressing                   |
|        |                 | 2     | Pain on touch                         |
|        |                 | 3     | Pain without touching                 |
| 2      |                 | 1     | 1-Time in day                         |
|        |                 | 2     | Frequent itching                      |
|        |                 | 3     | Itching disturbs the sleep            |
| 3      | Daha (Burning sensation) | 0 | No Burning sensation |
|        |                 | 1     | Burning during itching                |
|        |                 | 2     | Continuous burning                    |

Table 3. Objective criteria

| Sr. No | Criteria       | Grade | Symptoms                                      |
|--------|----------------|-------|-----------------------------------------------|
| 1      | Padshutana (cracks) | 0   | no cracks                                     |
|        |                 | 1     | cracks on heels only                         |
|        |                 | 2     | Cracks on heels and planter aspect of toes   |
|        |                 | 3     | Cracks on complete foot                      |

Table 4. Differential diagnosis between Palmoplantar psoriasis, Tylosis (Palmoplantarkeratoderm) and Dermatitis

|                      | Palmoplantar psoriasis | Tylosis (Palmoplantarkeratoderm) | Dermatitis                                      |
|----------------------|------------------------|-----------------------------------|-------------------------------------------------|
| Itching – Moderately itchy. | Itching present        | Very itchy. Scratching results in bleeding |
| Scratcing results in bleeding |                        |                                   |
| Morphology – well defined indurated plagues | Punctate, striate or mutilating. | Not so well defined and not indurated. |
| Sometimes, the keratoderma spills onto dorsum of hands and feet |                                    |
| Surmounted with silvery plagues | Thickening and mutilation | Scale – crust                      |
| Auspitz sign – positive | Negative | Negative, Patch test is done |
| Nail changes – Typical | Not present | Variable |

And after two follow up Arogyavardhini vati is stopped and Raktapachak kadha is replaced by Kandughna kadha. The rest of the treatment is continued for the next 30 days. Arogyawardhini vati is again started at the fifth follow-up.
3. OBSERVATION AND RESULTS

The result was observed after each follow-up of 15 days and pre and post-treatment after analyzed the subjective and objective criteria of the Patient. After the complete treatment for 90 days, the condition of the patient after each follow up is a follows: Table 6.

After a complete treatment assessment score is 0, it shows that the patient has 100 % relief in Cracks, burning sensation, itching, and pain. Pictures of the sole of both feet also show significant relief during the treatment and after the treatment [Fig. 1] [Fig. 2] [Fig. 3]

4. DISCUSSION

As a cosmetic purpose, many skin diseases have their unique importance, but in this case, along with the cosmetic involvement patient had difficulty in daily activity due to severe pain in both the soles. She was unable to walk properly and had insomnia due to pain and nocturnal itching. She had taken medicine from allopathy and homeopathy but still didn’t get the result so, she came to OPD for Ayurvedic treatment. This case of Vipadika, treated with Hingwadi vati, Arogyavardhini vati, Gandhak rasayan, Raktapachak kadha, Kandughna kadha and karanj tail for local application.

Hingwadi vati contains Hingu (Ferula asafoetida), Amlavetas (Garcenia indica), Vyosh (Piper longum, Piper and Ginger), and Trilavan [8]. It acts as the best appetizer [9].

Arogyavardhini: Loha(Calcined iron), Abhrak(Biotite mica), Tamra(Incinerated copper), Shilajit(Asphaltum), Guggul(Commiphora mukul), Chitrak (Plumbago zelaynica) and Kutki (Picornhiza kuro) are the main contents of Arogyavardhini vati. Along with these drugs it contains Triphala, kajjali, Nimba patra swaras. These drugs have Vatanashak, Pachak (Digestive), Dipak (appetizer), Vishaghna (Antitoxic) and Jantughna (antimicrobial) effect Arogyavardhini is mentioned as the best medicine for skin diseases [10]. It helps to improve digestion, clears the body channels to improve the tissue health and by balancing the fat, and removes the toxins from the body, by acting on digestive system [11].

| Type of treatment | Drug              | Dose  | Time of administration | Duration | Anupana       |
|-------------------|-------------------|-------|------------------------|----------|---------------|
| Internal medication | Hingwadi vati     | 250 mg| Before meal            | 7 days   | Lukewarm water |
|                   | Arogyavardhini vati| 250 mg| Before meal B.D        | 30 days  | Lukewarm water |
|                   | Aragwadhakapila   |       | H. S                   | 30 days  | Lukewarm water |
|                   | Gandhak rasayan  | 250 mg| B. D, After meal       | 30 days  | Lukewarm water |
|                   | Raktapachak kadha| 20 ml | B.D Before meal       | 30 days  | Lukewarm water |
|                   | Karanj tail       |       |                        |          |
| Local application | Leech therapy     |       |                        |          | After every 15 days |

Table 6. Assessment of each follow up

| Features          | Before Treatment | First | Second | Third | Fourth | Fifth | Sixth | After Treatment |
|-------------------|------------------|-------|--------|-------|--------|-------|-------|-----------------|
| Padashutana       | 3                | 3     | 3      | 2     | 2      | 1     | 1     | 0               |
| (Cracks)          |                  |       |        |       |        |       |       |                 |
| Daha (Burning     | 2                | 1     | 0      | 0     | 0      | 0     | 0     | 0               |
| Sensation)        |                  |       |        |       |        |       |       |                 |
| Kandu (Itching)   | 3                | 2     | 2      | 2     | 2      | 2     | 1     | 0               |
| Vedana (Pain)     | 3                | 2     | 2      | 1     | 0      | 0     | 0     | 0               |
Gandhak rasayan: It contains Shuddha gandhak (Pure sulphur), Chaturjat, Triphala, Sunth,(Zinzbiber officinalis) Maka (Eclipta alba) and Gulwel.(Tinospora cordiola) It acts as kushtaghna (fights with skin ailments), vishaghna (Antitoxin), Rasayan (Antioxidant), Jatughna, (Antimicrobial) and Yogvahi(Increases the action of drug) [12]. Gandhaka Rasayan is Pitta shamak in nature, which acts as anti-inflammatory [13].

Raktapachak kadha: It contains Patol (Trichosanthes dioica), Sariva (Hemidesmus indicus), Musta (Cyprus rotandus), Kutki, (Picchorhiza kurro) and Patha (Cissampulous pariera). It is used in detoxification of blood [14].

Kandughna kadha: It contains Chandan (Santalum album), Nalad (Nardostachys Jatamansi), Krutmalak (Cassis fistula), Latakaranj (Pongamia pinnata), Neem (Azadirachta indica), Kutaj (Holarrhena antidysentrica), Saraso (Brassica nigra Koch), Mulathathi (Glyrrhiza glabra), Daruhaldi (Berberis aristata) and Nagarmotha (Cyprus rotanandus) [15]. The drugs present in this gana are Tikta (Bitter) and Kashay (astringent) Rasa (Taste). Tikta rasa is antitoxic, Krumignha (antimicrobial), in nature and also used in burning sensation, itching and is important in skin diseases. Kashay rasa is used for mitigation and also increases the healing capacity of the drug in qualities [16]. By these two important properties, it is used in most of the diseases which have prominent symptoms of itching.

Karanj tel: It contains karanj (Pongamia pinnata), Saptacchada (Alstonia scholaris), Langali (Gloriosa superba), Arka (Calatropis procera), Chitraka (Plumbago zeylanica), Brungaraj (Eclipta alba), Vatsanabh (Aconitum ferox), Gomutra (Cowurine) [17]. It is widely used in various skin diseases. The karanj-oil contains medicinal properties and used in itches, abscess and other skin diseases [17].

Aragwadhakapila: It contain Argwadha (Cassia fistula) and Kampillak (Mallotus philippensis) Cassia fistula is best as mild laxative [6] which excretes Pitta and toxins. Mallotus philippensis is also useful as laxative and in various skin diseases to remove he toxins [18].

Jaloukavachran: According to Acharya Sushruta, although there are four Doshas in body. When Raktadhautu (Blood) is expelled out of the body it carries vitiated Pitta (Bile) along with it. Raktmokshan (Blood letting) cause Prasad manas (normalization of physiology of manas or whole body with senses), it prevents Raktaj rogas (formed due to Blood vitiation) like skin doshas [19]. Jaloukavacharan (Leech therapy) is best for diseases of pittaj manifestations [20]. Daha (Burning) was the associated symptom in this patient.

Similar dermatological problems were addressed in Global burden of disease studies [21-22]. Few of the psoriasis related studies and cases were reviewed [23-26].

In this case of Vipadika (Palmoplantar psoriasis), The overall symptoms namely cracks, burning sensation, pain, and itching get subsided by Classic treatment of Ayurveda. Here the work is
predominantly on *Raktavaha strotas*. In classics, it is stated that before starting treatment the *strotas* should be cleaned to ensure fast absorption of drugs [27-28]. For this purpose, *Hingwadi vati* is administered which is used as appetizer and helps in cleansing *Strotas*. *Arogyavardhini* is administered for 45 days. It mainly works on *Pitta*. *Raktapachak kadha* and *Kandughna kadha* is given to pacify the *Rakta* related symptoms like burning sensation and itching. Local application of *Karanja tail* pacifies the local symptoms immediately. It soothes the affected area and relieves from pain and itching. Leech therapy improves the condition fast where *Rakta* and *Pitta* dohas are involved [29-30].

5. CONCLUSION

Skin diseases are very hard to treat and line of treatment is not fixed in each patient so this study can be taken as the primary protocol to treat the patients of *Vipadika* as it shows good result in cracks, burning sensation, pain, and itching and gets complete relief within 90 days with no side effect. Further research can be carried out on Series of cases with the same protocol for confirmation of the drugs. Also, this can be used in other skin diseases having the same symptoms.

CONSENT AND ETHICAL APPROVAL

As per international standard or university standard guideline patients consent and ethical approval has been collected and preserved by the authors.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Shukla V, editor, Tripathi R, Charak samhita of Agnivesha, Varanasi Chaukhamba surabharati Prakashan. 2007;182.
2. Tripathi B, Editor, Ashtang hridaya of Vaghbhata, Delhi, Chaukhamba Sanskrit pratishtan. 2013;530.
3. Shashtri A, Sushruta Samhita of Acharya Sushruta, Varanasi Chaukhamba Sanskrit sansthan. 2013;75.
4. Acharya Dalhan, Vaidhya Jadavji Trikamji Acharya, Sushruta Samhita with Nibandhasangraha, Sutrasthan. Varanasi, Chaukhamba orientalia. 35;(16): 152.
5. Sushruta, Kaviraj, Ambikadutta Shashtri, Sushruta Samhita, Varanasi Chaukhamba Sanskrit sansthan. 2013;74.
6. Buran T, Sanem Gökçe Merve Kılınç, & Elmas Kasap. Prevalence of Extraintestinal Manifestations of Ulcerative Colitis Patients in Turkey: Community-Based Monocentric Observational Study. Clinical Medicine and Medical Research. 2020;1(2):39-46. Available:https://doi.org/10.52845/CMMR/2020v1i2a8
7. Shukla V, editor, Tripathi R, Charak samhita of Agnivesha, Varanasi Chaukhamba sanskrit sansthan. 2007;338
8. Khanna N Illustrated synopsis of Dermatology and sexually transmitted diseases, 4th, Genoderm and Genodermatoses, New Delhi. 2011;29.
9. Rasatarrangini, Shri Sadanand Sharma, Dr. Ravindra Angadi, Chaukhamba surbharati prakashan, Varanasi, 2015
10. Available:https://www.chakrapaniayurveda.com/product/hingvadi-vati/, [last assess on 19-04-2020]
11. Daniel V, Daniel K. Perception of Nurses’ Work in Psychiatric Clinic. Clinical Medicine Insights. 2020;1(1):27-33. Available:https://doi.org/10.52845/ClMI/2020v11a5
12. Ayurvediya aushadhi gunadharma shastra, Vaidyapanchanan Gangadharsastri Gopalrao Gune, Ganesh printer, pune, Reprint. 2005;208.
13. Pal Santosh, Ramamurthy A, Mahajan Bidhan, Arogyavardhini Vati : A theoretical analysis, Journal of Scientific and Innovative Research. 2016;5(6):225-227.
14. Ayurvediya aushadhi gunadharma shastra, Vaidyapanchanan Gangadharsastri Gopalrao Gune, Ganesh printer, pune, Reprint. 2005;270.
15. Mitra S, Prajapati PK, Shukla VJ, Ravishankar B. Impact of Bhavana Samskara on physico-chemical parameters with special reference to Gandhaka Rasayana prepared by different media and methods. Ayu. 2020;31:382-96.

16. Daniel V, Daniel K. Exercises training program: It's Effect on Muscle strength and Activity of daily living among elderly people. Nursing and Midwifery. 2020;1(01):19-23. Available:https://doi.org/10.52845/NM/2020v1i1a5

17. Shukla V, editor, Tripathi R, Charak samhita of Agnivesha, Varanasi Chaukhamba surabharati Prakashan. 2007;99

18. Shukla V, editor, Tripathi R, Charak samhita of Agnivesha, Varanasi Chaukhamba surabharati Prakashan. 2007;73.

19. Shukla V, editor, Tripathi R, Charak samhita of Agnivesha, Varanasi Chaukhamba surabharati Prakashan. 2007;371.

20. Mishra G, Shashtri A, Bhaishajyaratnavali, Chaukhamba series office, Varanasi. 1951: 652.

21. Available:http://www.easyayurveda.com/2017/04/18/kampillaka-mallotus-philippines [last assess on 20-04-2020]

22. Nibandh Sangraha. Commentary on Sushruta samhita, Vaidya Yadavji Trikamji acharya, Shri Dalhanacharya, Sutrastan, Adhyay Chaukhamba Sanskrit sansthan Varanasi. 2009;14:33-34,55

23. Shashtri A, Sushrutha Samhita of Acharya Sushruta, Varanasi Chaukhamba Sanskrit sansthan. 2013;57.

24. Daniel V, Daniel K. Diabetic neuropathy: new perspectives on early diagnosis and treatments. Journal of Current Diabetes Reports. 2020;1(1):12–14. Available:https://doi.org/10.52845/JCDR/2020v1i1a3

25. Lozano R, Fullman N, Mumford JE, Knight M, Barthelemy CM, Abbastabar CH. Abbastabar, et al. “Measuring Universal Health Coverage Based on an Index of Effective Coverage of Health Services in 204 Countries and Territories, 1990–2019: A Systematic Analysis for the Global Burden of Disease Study 2019.” The Lancet. 2020;396(10258):120–84. Available:https://doi.org/10.1016/S0140-6736(20)30750-9.

26. Abbafati C, Machado DB, Cislaghi B, Salman OM, Karanikolos M, McKee M, Abbas KM, et al. “Global Age-Sex-Specific Fertility, Mortality, Healthy Life Expectancy (HALE), and Population Estimates in 204 Countries and Territories, 1950–2019: A Comprehensive Demographic Analysis for the Global Burden of Disease Study 2019.” The Lancet. 2020;396(10258):1160–1203. Available:https://doi.org/10.1016/S0140-6736(20)30977-6.

27. Balwani MR, Pasari A, Tolani P. Widening Spectrum of Renal Involvement in Psoriasis: First Reported Case of C3 Glomerulonephritis in a Psoriatic Patient.” Saudi Journal of Kidney Diseases and Transplantation. 2019;30(1):258–60. Available:https://doi.org/10.4103/1319-2442.252922.

28. Chavhan S, Jawade S, Bapat AV. “Study of Systemic Comorbidities in Patients of Psoriasis.” International Journal of Pharmaceutical Research. 2019;11(1) 1229–33. Available:https://doi.org/10.31838/ijpr/2019.11.01.217.

29. Deshmukh S, Singh A. A Study on the Quality of Life in Patients of Vitiligo, Psoriasis and Pemphigus Vulgaris. European Journal of Molecular and Clinical Medicine. 2020;7(7):2158–65.

30. Deshmukh, S.G., and T.I. Thakre. Approach towards Kushtha (Psoriasis) with Ayurveda-A Case Study.” International Journal of Research in Pharmaceutical Sciences. 2020;11(4):5546–54. Available:https://doi.org/10.26452/ijrps.v11i4.3189.

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