EFFECT OF PUTIKADI PRATISARANEeya KSHARA POST CHEDANA KARMA AS THE MANAGEMENT OF KADARA (FOOT CORN)


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Abstract - Kadara is a kshudraroga which is characterized by hard and thickened local skin, largely confined to the sole, as well as palm. Even though the disease kadara is not a life-threatening condition, but makes the life miserable. Aetiological factors include injury due to the thorn prick, stone, cut, friction, pressure or wearing ill-fitting and tight shoes. Kadara described in Ayurveda can be correlated to corn foot in western medicine. The current management are unsatisfactory due to great chances of recurrence. According to Acharya Sushruta excision followed by cauterization is the treatment protocol. Ksharakarma is a chemical cauterization can remove dead and unhealthy tissue from the site. The antioxidant action by putikadi kshara in wound promotes wound healing after excision of corn.

Keywords: Chedana karma, Corn foot, Kadara, Pratisaraneeya kshara, Putikadi Pratisaraneeya kshara.

INTRODUCTION

Kadara is a disease of localised hardened layers of skin in soles and palms developing as a response to friction or continuous pressure. Kadara is known by term “corn” in western medicine1. The incidence of corns on the feet has been reported to be ranging from 14% to 48%2. They have been reported to affect older age groups with a slight female predominance due to wearing of narrow shoes. The elderly are also subject to loss of protective fat pad cushioning called fat pad atrophy, which can accelerate the incidence of painful corns. Acharya Sushruta has explained the disease kadara in kshudra roga, which are diseases having simple pathology, but very difficult to cure. Kadara is painless to start with, but gradually progresses to pain and tenderness on walking and standing. Repeated injuries due to the friction of the sole with thorns or stones results in kapha – vata dosha elevation. The elevated dhatus mixed with meda-raktha giving rise to keratinization of the sole. The keratinized mass presenting with symptoms of pain is termed as kadara7.

Corns are primarily diagnosed on clinical presentation. On inspection, the lesion appears to be flesh – coloured, dry tissue with a whitish center called the core4. These signs simulate Sushruta’s explanation of kadara as keelavat (lesion resembling a keela), kathina (hard), granthi (knotted), madhyo nimna (depressed at the center) or unnata (elevated in the center), kolamatra in size, tender and sometimes with srava (discharge). On palpation, a horny induration of the cuticle with a hard deep central core with extensions into the deeper layers of the dermis. The important criteria in differentiating corns from plantar warts is that in corns, the plantar skin lines may be observed with the lesions, unlike plantar warts. Furthermore, if the physician exerts a digital pressure perpendicularly to the plantar corn, the later will meet the bony prominence, elicits pain. Usually, corns are located over a bony prominence. They are most found on the dorsum of the toes, in the last interdigital web space, as well as on the soles of the feet. Due to overgrowth and further thickening of keratin, corns can grow and cause severe pain on ambulation. The genesis of corn is due to proliferation of all epidermal layers (acanthosis), including the stratum corneum, with retention of their nuclei (parakeratosis), indicating premature differentiation. Microscopically, the granular cell layer may be diminished or absent. The dermis may often show dense fibrous tissue with hypertrophied nerves and scar tissue may extend to the subcutaneous fat6.

Preventive measures include use of soft shoes or soft pads at pressure point of the sole. Conventional strategies for corn includes local application of salicylic acid and use of corn caps. Surgical management involves excision of corn. Corn tends to recur even after excision5. But application of Putikadi pratisaraneeya kshara after excision of corn helps to remove complete dead tissue from the wound and also promote wound healing as kshara has chedana, bhedhana, lekhana, sodhana, ropana properties6. Kharakarma is the important anushastrakarma mentioned by Acharya Susruta7. The effect of putikadi pratisaraneeya kshara in wound after excision of footcorn has been studied.
CASE REPORT

A 30 year old male who was working as security guard came to Shalyatantra OPD on 12/8/2023. Patient complained pricking type of pain and hardness on anterior aspect of right sole since 3 months. Had a whitish hard tissue on right sole. As part of his occupation he has to stand for long periods of time and continuously worked while standing on rough surfaces. The pain was aggravated by walking without footwears. Patient does not suffer from any other co-morbidities. On general examination pain was very high. Bowel habits and micturition are normal. He usually takes mixed food and have good appetite and sound sleep. On examination hyperkeratinised tissue with severe tenderness and hardness noted at 1st and 2nd interdigital space of anterior aspect of right sole. He has no discharge from that area and patient was afebrile. Finally, the patient was diagnosed as a case of footcorn and can be correlated to kadara.

TREATMENT PROTOCOL

Excision followed by Putikadi pratisaraneeya ksharakarma → vranaropa

SURGICAL INTERVENTION

Poorvakarma: Informed consent was taken. Blood investigations (on 12/08/23) were within normal limits.

Pradhanakarma: Complete excision of corn had been done. Putikadipratisaraneeya kshara applied for vaksatamatrakala. Followed by kshara, apple cider vinegar applied for neutralizing excess action of kshara.

Paschatkarma: Wound was packed with sterile gauze pad. Suggested daily dressing with Jatyadikerataila upto 14 days

Details of internal medication

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<th>Type of therapy</th>
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<td>Internal usage</td>
<td>Triphalaguggulu tab</td>
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Follow up

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<th>7th day</th>
<th>14th day</th>
<th>28th Day</th>
<th>42nd Day</th>
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<td>0</td>
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<td>0</td>
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<tr>
<td>Tenderness</td>
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<tr>
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<td>6</td>
<td>4</td>
<td>3</td>
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</tbody>
</table>

After 1 week

After 28 days

After 42 days

After 90 days
RESULT
Pain and tenderness of patient reduced drastically. The wound was healed very quickly. Patient could walk even without soft footwear.

DISCUSSION
Kadara is a disease of localised hardened layers of skin in soles and palms developing as a response to friction or continuous pressure. According to Acharya Sushruta, utkartana (excision) followed by tailadahana is indicated as treatment protocol. This procedure is helpful for wound healing due to sookshma guna of taila. But this is a cumbersome and painful procedure. The lag in healing also remains as a lacuna in the successful outcome of this protocol. It is at this juncture, the idea of subsequent application of kshara post utkartana of kadara popped up, as kshara is vranaropaka. Kshara is an important anusastrakarma which has sookshma, sodhana, lekhana, ropana, soshana and stambhana properties. It has an added advantage of krimi-ama-kapha-kushta-visha-medohara. Pratisaraneeya kshara can remove remaining dead tissues from the wound after excision and promote healing of wound. It can prevent the recurrence of the disease. Hence pratisaraneeya kshara karma post chedana karma might be the ideal choice in kadara management. The principal drug chosen for kshara nirmana is putika (Holoptelia integrifolia). Putika has ropana and stambhana karma due to tikta kashaya rasa. The adjuvants needed for kshara preparation are sudhasarkara and chitraka. Sudhasarkara (CaCO₃) can increase the alkalinity of kshara and chitraka (Plumbago zeylanica) can enhance the teekshnata of kshara.

Excision (chedanakarma) is an important procedure in corn management. Maximum dead tissue was removed by complete excision. It helped to remove foreign body from the site. Then the remaining dead or unhealthy tissue was removed by pratisaraneeya ksharakarma. Probable mode of action by application of pratisaraneeya kshara could be the anti-inflammatory action or an any drug having an anti-inflammatory activity may show prohealing effect. A wound will initiate inflammation since the wound is basically caused by break in the continuity of the soft parts. This in turn stimulates the production of free radicals leave the cells and enter the extracellular space where anti-oxidant protection remains weak. Then the current wound is so susceptible for any abnormalcy due to production and act of free radicals. Further it could damage healthy cells, inhibit myofibroblast proliferation and thereby retard the healing process of a wound. The anti-oxidant action of drug helps to scavenge extracellular released free radicals without interfering in the intracellular peroxidation of bacteria within the phagosome. Thus drug helps in acceleration of wound healing process.

The internal medicine Triphalaguggulu is also a wonderful antiinflammative drug. It has vranaropaka property. It also leads to a reduction in pain associated with the wound. Jatyadi keratala used for daily dressing. Ingredients present in Jatyadi keratala are anti-septic, anti-bacterial, anti-fungal and has rejuvenate capabilities. When it applied locally, it destroys the microbes and aids in fast recovery from the wound. The wholesome effect of all drugs gave good result.

CONCLUSION
Attempts to manage wound after excision of footcorn with application of Putikadi pratisaraneeya kshara was studied. Observations proved significant symptomatic relief and quick healing. There was no recurrence also. This method is effective and economical feasible. It can practise as an OPD procedure, hence the best option to opt for foot corn management.

INFORMED CONSENT
Informed consent has been provided by the patient to publish the case report and image.

LIMITATION OF THE STUDY
This is a single case study. Hence more number of cases needs to be subjected to study for validation.

REFERENCES:


