Retrospective case management of *Thunmamisa kaddi* (soft tissue lesion) of the foot using Siddha herbo-mineral regimens

Vadivampikan V.[1*], Mathivathanan R.S.[1] and Soruban T.[2]

Abstract

Soft tissue lesions, encompassing both benign and malignant neoplasms, may arise from fibrous connective tissue, adipose tissue, skeletal muscle, or vascular structures. In the Siddha system of medicine, such conditions may be correlated with "*Thunmamisa kaddi*" as per the Tamil-English dictionary. This case reports on a 9-year-old female admitted to the Inpatient Division, Siddha Teaching Hospital, Kaithady, with a soft tissue lesion on the dorsum of the left foot, located between the 4th and 5th metatarsal bones. The lesion was hard, fixed, and tender, measuring 31.2 × 19.9 mm, and had caused difficulty in walking for the past one and half year. The patient underwent a combined internal and external Siddha treatment protocol for four weeks. Internal medicines included *Kazharchi chooranam*, *Parangipattai chooranam*, *Ganthaga rasayanam*, and *Serankottai nei*. Externally, after cleansing with saline water, an *Uppu seelai* (salt-soaked gauze) was applied for two hours daily, followed by *Kazharchi pattru* for three weeks and a herbo-mineral *Pattru* in the final week. Progress was evaluated using the Soft Tissue Tenderness Grading Scheme (STTGS) and digital Vernier scale measurements. The lesion size reduced significantly to 15.5 × 12.3 mm, and the STTGS improved from 4 to 1. Pain subsided, and mobility improved markedly. The treatment was non-invasive, safe, and well-tolerated, with high patient satisfaction and no adverse effects. This case underscores the potential of Siddha therapies in managing soft tissue lesions, encouraging further scientific validation in larger populations.

Keywords: Herbo-mineral *Pattru, Kazharchi pattru*, Salt-soaked gauze, Soft tissue lesion, *Thunmamisa kaddi, Uppu seelai*

Introduction

Soft tissue lesions belong to a large and heterogeneous group of disorders, varying from normal anatomic variants, inflammatory and infectious lesions, soft tissue trauma, foreign body reactions, skin lesions, metabolic disorders, non-neoplastic vascular lesions, amyloidosis and miscellaneous disorders[1]. Soft tissue lesions, encompassing both benign and malignant neoplasms, may arise from fibrous connective tissue, adipose tissue, skeletal muscle or vascular structures. In the foot and ankle region, benign neoplasms and pseudo-tumoral soft tissue lesions are significantly more frequent than malignant tumours[2]. In the Siddha system of medicine, such conditions may be correlated with "*Thunmamisa kaddi*" as per the Tamil-English dictionary.

Siddhar *Aruvai Maruthuvam* classifies *Kattikal* into two types based on location and six types according to the *Dosha*[3]. Tamil-English dictionary by T.V. Sambasivam Pillai, mentioned that 20 types of *Kattigal*, among this *Thunmamisa kaddi* was included in this type[4].

Soft tissue lesions of the foot in pediatric patients often require surgical or long-term conventional management, which may be associated with recurrence, invasiveness, and functional limitations.

[1]*Siddha Teaching Hospital, Kaithady, Sri Lanka.*
[2]*Postgraduate Institute of Indigenous Medicine, University of Colombo, Sri Lanka.*

Correspondence: Vadivampikan V., Siddha Teaching Hospital, Kaithady, Sri Lanka.
Email: vadivampikanv@gmail.com

In the Siddha system of medicine, such swellings closely correlate with *Thunmamisa kaddi*, described as a solid soft tissue mass arising due to derangement of *Pitham* and *Kapham*. Considering the chronic nature of the lesion, absence of bony involvement, and benign imaging findings, a non-invasive Siddha herbo-mineral approach was justified in this case. The selected internal medicines possess anti-inflammatory, antimicrobial, immunomodulatory, blood-purifying, and tissue-resolving properties, while external therapies such as *Uppu seelai*, *Kazharchi pattru*, and herbo-mineral *pattru* promote local resolution through absorption, scraping, and detoxifying actions. This holistic Siddha regimen aimed to reduce the lesion, alleviate pain, and restore mobility safely, thereby demonstrating its potential as an effective, child-friendly alternative in the management of *Thunmamisa kaddi*.

Case study

This is a retrospective, single-case analysis conducted through the review of the Bed Head Ticket (BHT) of a 9-year-old female patient admitted to the Inpatient Division of Siddha Teaching Hospital, Kaithady. Before the case recordings, the written consent obtained by the patient and from the parents also. All relevant clinical data including patient history, examination findings, diagnostic measurements, treatment protocols and outcome assessments were extracted from the BHT records. Internal and external treatments were documented as per physician notes.

A 9-year-old female student from Velanai, Jaffna, was admitted to the Inpatient Division of Siddha Teaching Hospital, Kaithady, with complaints of a soft tissue lesion on the dorsum of her left foot. The lesion was located between the 4^{th} and 5^{th} metatarsal bones. On examination, the lesion appeared hard, fixed, and tender, measuring 31.2 × 19.9 mm. The condition had persisted for the past one and a half years, resulting in significant discomfort and difficulty in walking.

Cyst description, physical examination and investigation

On inspection, a single oval-shaped cyst was observed on the dorsum of the left foot, specifically located between the 4th and 5th metatarsal bones. The lesion had a well-defined margin with a smooth surface, and the overlying skin appeared normal. On palpation, the cyst measured 31.2 mm × 19.9 mm, with a firm consistency. Tenderness was present, and the lesion was not fixed. The local temperature was warm.

On Investigations, an ultrasound scan (dated 20.12.2023) revealed a cystic lesion on the left foot dorsum in the subcutaneous area, measuring 2.7 × 1.5 cm, with internal vascularity. NCCT of the left foot on the same date showed a soft tissue density lesion in the interdigital space between the 4th and 5th metatarsal bones, extending to the dorsal aspect, measuring 1.1 × 1.7 cm. No periosteal reaction, bone erosion, or metallic foreign body was noted. Blood investigations showed CRP at 1.6 and ESR at 19.

Treatment protocol

The patient was managed following the traditional medicine line of treatment. On the first day, *Meni thailam* (10 ml) was administered at 10.00pm with warm water on an empty stomach as a laxative to initiate detoxification. On the second day, 50 ml of gingelly oil was applied over the entire body, followed by a warm water bath after 20 minutes to facilitate external oleation and improve circulation. From the third day onwards, internal medicines were administered for 24 days to support cyst reduction and healing (Table 1). Diet was restricted with hospital food for light, easily digestible *Pathiyam* diet.

Table 1: Internal medicines administered

Internal medicine from 3rd day to 28 days

Name of drug	Dose and duration	*Anupanam*
Kazharchi chooranam	1g twice in a day, after food	Honey
Parangipattai chooranam	1g twice in a day, after food	Honey
Ganthaga rasayanam	100mg twice in a day, after food	Milk
Serankottai nei	10drops twice in a day, after food	Milk

The external treatment involved cleansing the wound with saline water, followed by the application of *Uppu seelai* (salt-soaked gauze) for two hours daily. This was continued with the application of *Kazharchi pattru* for first three weeks. *Kazharchi pattru* ingredients include 30g of *Kazharchi chooranam* (prepared from *Caesalpinia bonduc*) mixed with an appropriate amount of egg white (Figure 1). The preparation involves grinding these ingredients together to form a smooth paste, which is then applied externally as a *pattru* on the affected area to aid healing and reduce inflammation[5].

Egg white ***Kazharchi* seeds**

Fig. 1: Composition of herbal ingredients in *Kazhatchi pattru* preparation

Finally, a herbo-mineral *pattru* was applied during the last week. Herbo-mineral *pattru* ingredients include 1 part each of *Kanthakal* (magnetic oxide of iron), *Kaavikkal* (red ochre), *Karuppu kollu* (*Macrotyloma uniflorum*), and *Puttu mann* (medicinal clay), along with with ¼ part of *Chukku* (*Zingiber officinale* - dry part) (Figure 2). These ingredients were finely ground and mixed with two egg whites to form a smooth paste, which was then applied externally as a *Pattru* over the affected area. This application helps to reduce inflammation and promotes faster healing of the affected area[6].

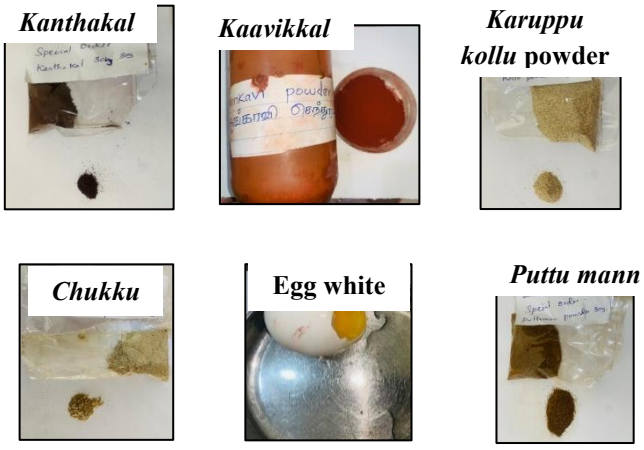

Fig. 2: Composition of herbal ingredients in herbo-mineral *Pattru* preparation

Results

Table 2 designate the measurements of the cyst size by weekly.

Table 2: Weekly cyst size measurements

Day	Length	Width	STTGS Score
2025.05.19 (Initial day)	31.2mm	19.9mm	IV
2025.05.26 (1st week)	27.5mm	19mm	III
2025.06.09 (2nd week)	20.8mm	16.4mm	III
2025.06.16 (3rd week)	19.6mm	13.6mm	II

2025.06.23 (4th week)	15.5mm	12.3mm	I


Figure 3 shows the wound images on follow up period


Fig. 3: Wound at 2025.07.23

Discussion

Kazhartchi chooranam possesses potent anti-inflammatory, analgesic, antimicrobial, antioxidant, and immunomodulatory actions, making it effective in reducing swelling, pain, and warmth in chronic soft tissue lesions. Its key constituents - bonducellin, caesalpinins, flavonoids, and fixed oils - help suppress inflammatory mediators, prevent infection, and promote tissue repair[7]. In Siddha terms, it aids in blood purification and correction of *Pitham* - *Kapham* imbalance, thereby facilitating healing in conditions like *Thunmamisa kaddi*.

Parangipattai chooranam is known for its anti-inflammatory, antimicrobial, antioxidant, detoxifying, and immunomodulatory properties. It is traditionally used in Siddha medicine for chronic skin and soft tissue conditions to reduce swelling, pain, and infection risk. Its key phytochemicals - saponins, flavonoids, resins, and essential oils - help purify the blood, neutralize toxins, and promote tissue regeneration[8]. In the context of *Thunmamisa kaddi*, it aids in clearing morbid humors (*Pitham*, *Kapham*), enhancing immunity, and supporting complete lesion healing.

Ganthaga rasayanam (purified sulphur-based formulation) exhibits anti-inflammatory, antimicrobial, antioxidant, and wound-healing properties. Sulphur acts as a potent antimicrobial agent, preventing secondary infections in chronic lesions, while also supporting tissue regeneration and reducing inflammation. It enhances circulation to the affected area, aiding in the resolution of swelling and pain[9]. In Siddha medicine, it is valued for blood purification and balancing deranged *Pitham* and *Kapham*, which is essential in managing *Thunmamisa kaddi*. Its rejuvenate nature strengthens immunity, helping to prevent recurrence of the lesion.

Serankottai nei (oil prepared from *Semecarpus anacardium*) is known for its strong anti-inflammatory, analgesic, antimicrobial, antioxidant, and immunomodulatory properties. It contains bioactive compounds such as bhilawanols, flavonoids, phenolic acids, and essential fatty acids, which reduce swelling, relieve pain, and promote tissue repair. In Siddha medicine, it is particularly valued for dissolving hard swellings, improving blood circulation, and clearing obstructions in affected tissues[10]. For *Thunmamisa kaddi*, it helps soften the lesion, control infection, and restore normal function of the foot while balancing aggravated *Pitham* and *Kapham.*

Uppu seelai is a traditional topical application used to shrink or soften localized swellings, abscesses, and certain types of tumors. When applied as a warm salt-soaked gauze over a lesion, it draws out excess fluid, reduces local *Kapham* accumulation, improves circulation, and promotes the breakdown of pathological tissue. The osmotic effect of salt dehydrates the abnormal growth, reduces edema, and can help alleviate pain. In addition, the mild antimicrobial action of salt prevents secondary infections at the site[11]. This method aligns with Siddha's principle of using localized therapies to balance aggravated humors and aid in resolution of solid swellings.

Kazharchi pattru (prepared from *Caesalpinia bonduc*) is used in Siddha medicine as an external application for hard swellings, glandular enlargements, and certain benign or malignant tumors. The plant contains active constituents like bonducin, caesalpin, and diterpenoids that exhibit anti-inflammatory, analgesic, antioxidant, and antiproliferative properties[12]. When applied as a poultice (*pattru*), it helps soften indurated masses, reduce inflammatory responses, and limit abnormal

cell proliferation. The astringent (*Thuvarppu*) nature aids in tissue contraction, while its detoxifying action supports the removal of accumulated morbid matter from the affected site. Modern pharmacological studies support its cytotoxic and antitumor potential, validating its role in traditional Siddha tumor management.

The herbo-mineral preparation containing *Kaanthakal, Kaavikkal, Karuppu kollu, Puttu mann, Sukku,* and Egg white acts synergistically to reduce tumor-like swellings such as *Thunmamisa kaddi*. *Kaanthakal* exerts anti-inflammatory and resolvent actions, helping to shrink and soften the hard lesion[13]. *Kaavikkal* provides an astringent and drying effect, reducing excess tissue fluids and supporting wound healing[14]. *Karuppu kollu* (*Macrotyloma uniflorum*) contributes anti-inflammatory, antioxidant, and lipolytic effects, aiding in dispersing hard swellings[15]. *Puttu mann* (Fuller's Earth) detoxifies, draws out inflammatory exudates, and cools the affected area[16]. *Chukku* (*Zingiber officinale*) improves local circulation with its anti-inflammatory and analgesic properties, enhancing absorption of the swelling[17]. Egg white acts as a binding agent and provides a proteinaceous base that supports tissue repair. Collectively, these ingredients reduce inflammation, soften the lesion, improve circulation, prevent infection, and balance deranged *Pitham* and *Kapham*, thereby promoting effective resolution of the swelling[18].

Conclusion

This research reflects that the herbal and herbo-mineral regimen are significantly effective in the management of *Thunmamisa kaddi* of foot and further scientific validation in larger population will be conducted in future.

Declaration of Informed consent

The authors certify that written informed consent has been obtained from the patient for the publication of this case report, including images and clinical information. It has been assured that the patient's identity will remain anonymous, with all efforts made to protect personal details from disclosure.

Source(s) of Funding

None

Conflict of Interest

None

References

1. Vanhoenacker, F. M., Salgado, R. A., Gielen, J. L., & De Schepper, A. (2023). Tumor-like soft tissue lesions. In *Musculoskeletal imaging*, 1-34.
2. Van Hul, E., Vanhoenacker, F., Van Dyck, P., De Schepper, A., & Parizel, P. M. (2011). Pseudotumoural soft tissue lesions of the foot and ankle: a pictorial review. *Insights into imaging*, *2*(4), 439-452.
3. Uththamarayan, K. S. (1968), Sidhar aruvai maruthuvam, *Tamilnaadu ezhuthuporul printers*, India, 41-45.
4. Sambasivan pillai,T. V. (1991), Tamil-English dictionary, *Directorate of Indian medicine and homoeopathy*, 2nd ed, India, 996-999.
5. Murukesa Muthaliyar, K. S. (2006), Siddha Materia Medica, *Indian medicine and homoeopathy*, 2nd ed, 251-253.
6. Uththamarayan, K. S. (1968), Sidhar aruvai maruthuvam, *Tamilnaadu ezhuthuporul printers*, India, 69-71.
7. Shukla, S., Mehta, A., Mehta, P., Vyas, S. P., Shukla, S., & Bajpai, V. K. (2010). Studies on anti-inflammatory, antipyretic and analgesic properties of Caesalpinia bonducella F. seed oil in experimental animal models. *Food and Chemical Toxicology*, *48*(1), 61-64.
8. Wang, M., Bai, Q. X., Zheng, X. X., Hu, W. J., Wang, S., Tang, H. P., ... & Kuang, H. X. (2024). Smilax china L.: A review of its botany, ethnopharmacology, phytochemistry, pharmacological activities, actual and potential applications. *Journal of Ethnopharmacology*, *318*, 116992.
9. Meena, R., & Ramaswamy, R. S. (2015). Therapeutic potency of a Siddha formulation Kandhaga Rasayanam: a review.

10. Semalty, M., Semalty, A., Badola, A., Joshi, G. P., & Rawat, M. S. M. (2010). Semecarpus anacardium Linn.: A review. *Pharmacognosy reviews*, *4*(7), 88.
11. Bin Rubaian, N. F. (2021). Complete resolution of a refractory pyogenic granuloma following topical salt treatment. *Open Access Emergency Medicine*, 445-448.
12. Sambasivam Manikandaselvi, S. M., Vellingiri Vadivel, V. V., & Pemaiah Brindha, P. B. (2015). Caesalpinia bonducella L.: a nutraceutical plant.
13. Lu, Z., Yu, D., Nie, F., Wang, Y., & Chong, Y. (2023). Iron nanoparticles open up new directions for promoting healing in chronic wounds in the context of bacterial infection. *Pharmaceutics*, *15*(9), 232
14. Charde, V., Kumar, V., Dane, G., Gandhi, Y., Soni, H., Jagtap, C., ... & Webster, T. J. (2023). Establishment of the mechanism of purification and levigation of green chemistry-assisted biocomposites of red ochre (Gairika): synthesis, characterization, and antibacterial, prebiotic, antioxidant, and antacid activities of the traditional Ayurvedic medicine Laghu Sutashekhara Rasa. *Frontiers in Chemistry*, *11*, 1271157.
15. Oli, P., Joshi, K., & Punetha, S. (2024). Traditional uses, phytochemistry, pharmacology, and nutraceutical potential of horse gram (Macrotyloma uniflorum): A systematic review. *Journal of Food Science*, *89*(12), 8102-8127.
16. Dhanasekaran, L., & Muralidharan, N. P. (2021). Antimicrobial Activity of Fuller's Earth, Turmeric, and Sandalwood against Streptococcus Mutans, Micrococci and Coagulase Negative Staphylococci-an In vitro Study. *Journal of Pharmaceutical Research International*, *33*(58B), 65-73.
17. Boarescu, I., Pop, R. M., Boarescu, P. M., Bocșan, I. C., Gheban, D., Bulboacă, A. E., ... & Bolboacă, S. D. (2023). Ginger (Zingiber officinale) root capsules enhance analgesic and antioxidant efficacy of diclofenac sodium in experimental acute inflammation. *Antioxidants*, *12*(3), 745.
18. Yubolphan, R., Phongsiri, K., Mongkhammee, N., Pidech, J., Roytrakul, S., Suwattanasophon, C., ... & Jangpromma, N. (2025). Anti-Inflammatory Effects of Hen Egg White Hydrolysate and Its Specific Peptides IS8, PA11, and PK8 on LPS-Induced Macrophage Inflammation. *Food Science & Nutrition*, *13*(8), e70713.