

Siddha Management of Persistent *Thabitham* (Swelling) Due to *Kaanaakkadi* (Unknown Insect Bite): A Case Report

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Abstract

Kaanaakkadi (NSMC Code: BEB1.1) is a Siddha clinical entity caused by an unidentified insect or arthropod bite and is characterized by inflammatory manifestations such as itching, erythema, wheal formation, and swelling. Persistent inflammatory swelling following insect bites may not respond adequately to conventional symptomatic management, necessitating alternative therapeutic approaches. This case report describes the successful Siddha management of a 59-year-old male who presented with persistent swelling of the right hand and forearm for one month following an unknown insect bite. The patient had received conservative allopathic treatment without satisfactory clinical improvement. Based on Siddha principles, the condition was diagnosed as Kaanaakkadi-associated Thabitham resulting from Vatham-Kabam derangement. The patient was treated on an outpatient basis for 21 days with Meni Thylam, Avuri Chooranam, Drakshadi Chooranam Tablet, Keezhanelli Chooranam Tablet, Palagarai Parpam, Kalladaippu Kudineer, and Arugan Kattai Kudineer. Clinical assessment showed minimal reduction in swelling during the first two weeks, followed by marked improvement in the third week, with progressive reduction in edema and improvement in general well-being. No adverse drug reactions were observed throughout the treatment period. The favorable outcome may be attributed to the combined anti-inflammatory, antioxidant, detoxifying, tissue-stabilizing, and Vatham-Kabam pacifying properties of the Siddha formulations. This case suggests that Siddha management may be a safe and effective therapeutic option for persistent inflammatory swelling following an unknown insect bite. However, further controlled clinical studies are required to validate these findings.

Keywords: Siddha, *Kaanaakkadi*, *Thabitham*, Urticaria, *Meni thylam*, *Avuri chooranam*, Case report.

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Background

Thirumoolar claims that insects and beetles are among the causes of skin diseases. In *Thirumanthiram 3000*, it was mentioned as *Kiranthisulan megathaalum payaathi mann ula pala vandinaalum*. [1] One type of skin condition caused by an unidentified bug bite is called kaanaakkadi (NSMC code BEB1.1). [2] Itching, erythema, wheal formation, and swelling are the signs and symptoms of *Kaanaakkadi*. It may be correlated with Unknown Insect Bite (ICD-11-XJ69A). [3] Erythematous and edematous eruptions and other dermatological findings such as papules and urticaria represent the most common clinical manifestations of arthropod bites and stings. When a bite or sting causes mechanical tissue damage, it can cause discomfort and swelling as well as open a door for germs that

could cause a secondary infection. Commonly, allergic reactions to the salivary antigens of arthropods result in cutaneous pruritus as well as systemic and localized rashes. [4,5] The most serious allergic reaction to arthropod stings and bites is anaphylaxis, which can happen very quickly and be lethal. [6] Simple supportive care measures, such as cleaning the affected area with soap and water, applying ice compresses, elevating the area if edema is present, updating tetanus status as needed, and using acetaminophen or NSAIDs to treat pain, can help manage most arthropod bites and stings. [7] One of the most typical side effects of bites and stings is pruritus, which can be managed with antihistamines, topical corticosteroids of intermediate intensity or calamine lotion. [8] Their usefulness has turned into

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a double-edged sword, as there are an increasing number of cases of abuse and misuse that have major systemic, local, and psychological negative effects. Higher potency topical steroids and specific body parts like the face and genitalia are more likely to cause these side effects.[9] New treatment approaches must be developed to reduce the clinical symptoms of unknown insect bites. Many medications, particularly *Kaanaakkadi*, are listed in Siddha literature for skin conditions. This case report deals with the case of an Unknown Insect Bite with a duration of one month which was treated in allopathic treatment without prognosis through the Siddha management by *Meni thylam*, *Avuri chooranam*, *Drakshathy chooranam* tablet, *Keezhanelli chooranam* tablet, *Palagarai parpam* tablet, *Kalladaippu kudineer*, *Arugan kattai kudineer* as internal medicines.

Patient Information

A 59-year-old male patient came to the NIS OPD with complaints of swelling present in the right fore arm and hand region for 1 month, No pain, itching, redness. The patient has a known history of diabetes mellitus for 1 year and is under regular allopathic medication. He had a past history of unknown insect bite at the dorsum of his right hand. Patient conservative allopathic treatment at nearby GH for the past 1 month. There was no reduction in swelling present in the right hand and forearm. His sleep and appetite were reduced, bowel and bladder habits were normal.

Clinical information

Table No.1- Siddha Eight-fold system of clinical assessment

Siddha Eight-fold system of clinical assessment[10]	
1.Naa (Tongue)	Normal
2. Niram (Colour of the body)	Normal
3. Mozhi (Speech)	Normal
4. Vizhi (Eye)	Normal
5. Sparisam (Palpation)	Normal
6. Naadi (Pulse)	Kaba pitham
7. Malam (stool)	Regular
8. Moothiram (urine)	Regular

Vitals

Temperature – 98.4°F
Blood pressure – 130/80mmhg
Pulse rate – 18/min
Heart rate – 80/min
Respiratory rate – 18/min

Local examination

Site of insect bite – Right hand and fore arm
Colour – Normal
Discharge -Absent
Skin -Normal

Pain -Absent
Swelling -Present
Blisters -Absent
Demarcation -Absent
Tenderness -Absent

Diagnostic assessment

The diagnosis was established based on a detailed clinical history, characteristic cutaneous findings, and supportive laboratory investigations, which revealed elevated ESR-32mm/hour, increased eosinophils in differential count-10%.[4]

Therapeutic interventions

Patient was treated with both internal medicines for 3 weeks from 10.05.2024 to 01.06.2024 as mentioned in Table No.2

Table No.2-Details of therapeutic interventions.

S.No	Medicine	Dosage	Adjuvant	Route
1	Meni thylam [11]	5 ml/HS	Milk	Oral
2	Avuri chooranam [11]	2gm BD	Hot water	Oral
3	Drakshathy chooranam tablet [11]	2 BD	Hot water	Oral
4	Keezhanelli chooranam tablet [11]	2 BD	Hot water	Oral
5	Palagarai parpam tablet [11]	4 BD	Milk	Oral
6	Kalladaippu kudineer chooranam [12]	60ml BD	-	Oral
7	Arugan kattai kudineer chooranam [13]	60 ml BD	-	Oral

Outcome and follow-up

The patient was treated with an OPD procedure for 21 days with three consecutive follow-up visits. The prognosis for the swelling present in the right forearm and hand was good. For the first two weeks, the reduction of swelling was minimal. In the third week, the swelling was reduced well. The measurements are mentioned in the Table No.3.

Table No.3-Details of measurements.

Region		1st visit	2nd visit	3rd visit	4th visit
Fore arm	Upper	27 cm	27 cm	26.5 cm	22.5 cm

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	Middle	23 cm	20 cm	20 cm	17.5 cm
	Lower	21 cm	20 cm	20 cm	15.5 cm
Wrist		25 cm	20.5 cm	20.5 cm	19 cm

Intervention adherence and tolerability

Since the patient was treated with an OPD procedure at Ayothidoss Pandithar Hospital of the National Institute of Siddha, regular follow-up visits helped in facilitating intervention adherence and tolerability.

Adverse and unanticipated events

No adverse and unanticipated events have occurred.

Discussion

Thabitham (Swelling) resulting from *Kaanaakkadi* (insect bite) is characterized by acute inflammatory swelling, pain, erythema, burning sensation and localized tissue reaction. According to Siddha literature, *Veekkam* (Swelling) is predominantly a manifestation of *Vatham-Kabam kuttram*. *Sathaga Naadi* explains that deranged *Vatham* disturbs the normal movement and distribution of body fluids, resulting in the displacement of intracellular fluid into the interstitial compartment. Subsequently, vitiated *Vatham* associates with *Kabam*, whose *Paluvu* (heaviness) property promotes fluid retention within tissues, leading to edema and inflammatory swelling. The pathological process involves the *Asaithal* character of aggravated *Vatham* and the *Paluvu* character of increased *Kabam*. Therefore, treatment should possess *Nilaitthal* and *Ilagu* qualities. *Nilaitthal* stabilizes altered fluid dynamics and restores tissue homeostasis, whereas *Ilagu* counteracts tissue heaviness, reduces edema and promotes the resolution of inflammation.

In this present case, *Avuri Chooranam*, *Palagarai Parpam*, *Arugan Kattai Kudineer*, *Drakshadi Chooranam*, *Kalladaippu Chooranam*, *Keezhanelli Chooranam* Tablet and *Meni Thylam* were administered to correct *Vatham-Kabam* derangement and alleviate inflammatory swelling. The observed clinical improvement may be attributed to the synergistic action of these formulations through detoxifying, anti-inflammatory, antioxidant and *Vatham-Kabam* pacifying mechanisms.

Avuri Chooranam (*Indigofera* spp.) is traditionally indicated in toxic and inflammatory conditions. Its predominant *Kasappu* (bitter) and *Thuvvarppu* (astringent) tastes help reduce *Kabam*, inflammatory exudation and tissue edema. Experimental studies on *Indigofera* species have demonstrated significant anti-inflammatory, analgesic and antipyretic activities, supporting its traditional use in inflammatory conditions

associated with insect bites and toxic reactions [14,15].

Palagarai Parpam possesses cooling, absorbent and tissue-stabilizing properties. From the Siddha perspective, its *Nilaitthal* quality helps restore altered fluid equilibrium, while its *Ilagu* property assists in reducing edema and tissue heaviness. Although direct pharmacological studies on *Palagarai Parpam* are limited, its traditional indication in inflammatory and edematous conditions supports its role in correcting *Vatham-Kabam* derangement.

Arugan Kattai Kudineer is traditionally prescribed in inflammatory and toxic conditions. The predominance of *Kasappu* and *Thuvvarppu* *suva* helps reduce inflammatory exudation and swelling. By pacifying aggravated *Vatham* and *Kabam*, the formulation may facilitate the resolution of localized edema and tissue inflammation associated with *Kaanaakkadi*.

Drakshadi Chooranam contains *Draksha* (*Vitis vinifera*), which possesses *Inippu* (sweet) and mild *Thuvvarppu* (astringent) tastes. In Siddha pharmacology, the sweet taste nourishes damaged tissues and alleviates aggravated *Vatham*, whereas the astringent component reduces inflammatory secretions. Modern studies have demonstrated that grape-derived polyphenols and proanthocyanidins exhibit potent antioxidant and anti-inflammatory activities through suppression of inflammatory cytokines and oxidative stress pathways, thereby promoting tissue repair and reducing edema [16,17].

Keezhanelli Chooranam Tablet (*Phyllanthus niruri*) possesses *Kasappu* and *Thuvvarppu* *suva*, which are traditionally known to reduce *Kabam* and inflammatory manifestations. Experimental and clinical studies have demonstrated significant anti-inflammatory, antioxidant, immunomodulatory and edema-reducing effects of *Phyllanthus* species. Reduction in inflammatory cell infiltration and tissue swelling observed in experimental models provides pharmacological support for its use in inflammatory conditions following insect envenomation or bite reactions [18–20].

Kalladaippu Chooranam is traditionally indicated for conditions involving obstruction, fluid accumulation and edema. Its bitter and pungent properties help reduce *Kabam* accumulation, improve physiological circulation and facilitate the removal of retained interstitial fluid. These actions may have contributed to the reduction of swelling and restoration of normal tissue function in the present case.

Meni Thylam, an internal Siddha medicated oil preparation, was administered to correct the underlying *Vatham-Kabam* imbalance. *Thylam* preparations are recognized among the thirty-two internal Siddha medicines and are traditionally used to pacify aggravated *Vatham* and restore

physiological equilibrium. The unctuous nature (*Neippu Thanmai*) of medicated oils opposes the excessive *Asaithal gunam* of vitiated *Vatham* and promotes tissue stability. Internal administration of *Meni Thylam* may also enhance the systemic delivery of bioactive phytoconstituents and contribute to the reduction of edema, pain, tenderness and inflammatory manifestations.

Overall, the combined action of these medicines appears to have restored the balance of *Vatham-Kabam kuttram* through their *Nilaitthal* and *Ilagu gunangal*. *Nilaitthal* opposed the excessive *Asaithal* property of aggravated *Vatham* and normalized fluid distribution, while *Ilagu* counteracted the *Paluvu* property of *Kabam* and reduced interstitial fluid accumulation. Consequently, inflammation, edema, pain, erythema and local tissue reactions subsided progressively. The favorable clinical outcome observed in this case supports the Siddha concept that *Thabitham* (Swelling) resulting from *Kaanaakkadi* (Insect Bite) can be effectively managed through medicines possessing detoxifying, anti-inflammatory, antioxidant, tissue-stabilizing and *Vatham-Kabam* pacifying properties. Further controlled clinical studies are warranted to validate these observations and elucidate the underlying pharmacological mechanisms.

Conclusion

The present case demonstrates that Siddha management effectively reduced persistent inflammatory swelling following an unknown insect bite after failure of conventional treatment. The prescribed formulations may have acted through anti-inflammatory, antioxidant, detoxifying, and *Vatham-Kabam* pacifying mechanisms. Although the outcome is encouraging, larger controlled studies are needed to confirm the efficacy and safety of Siddha treatment in *Kaanaakkadi*.

Limitations of the study

As this case report focuses on a single instance with a positive outcome, the findings cannot be generalized. Additional well-designed clinical trials are necessary to evaluate its efficacy.

Informed consent

Proper informed consent was obtained from the patient.

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