



Kudori Maruthuvam: A Classical Emergency Intervention For Revival

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BACKGROUND

The Antique Siddha system of medicine deals through internal medicine and External Medicine . This system has an unambiguous surgical management with *asura maruthuvam* where It comprised of several *therapy consists of kombukattal, aruvai, Suttigai and kudori*, where *kudori* is predominantly used for in emergency cases like snake bite, psychiatry, epilepsy and eye disorders

Although *Kudori* is well-documented in ancient manuscripts, its clinical application has been undervalued in recent decades. The therapy is known for its simple yet effective methodology, using readily available instruments such as sharp knives, coconut shells, glass pieces, or rice grains with husk. Its underlying principle is to eliminate toxins and restore balance, thereby providing rapid relief in acute and life-threatening situations been described in ancient text which are briefly detailed in this manuscript.

KEYWORDS

Kudori maruthuvam, Surgery, External Medicine, Siddha, AYUSH

Introduction:

The Siddha system of medicine, one of the most ancient traditional medical system in India, which encompasses diverse therapeutic approaches, through internal medicine and external therapy including surgical practices. Among these, *Kudori Maruthuvam* is a unique external therapy described in classical Siddha texts such as *Agathiyar Nayana Vithi, visha aarudanoolgal* etc.. Its principle is to allow direct interaction between the medicine and blood, thereby enhancing efficacy.

Kudori , It is a type of medical incision or applying specified medicine on the incision site creating a small incision at specific anatomical sites, followed by the application of appropriate medicines. This technique is particularly emphasized in emergency conditions such as snakebite, animal bites, epilepsy, coma, psychiatric disturbances, fainting, and delirium. Though referenced in many ancient manuscripts the clinical practice of *Kudori* has declined in recent decades.

Synonyms :

In siddha literature , *Kudori* means traditional instrument used for medical inversion *slitting with knife*¹ ,Other related terms are *Venkaram*²(borax), *vanga manal*³(lead ore), *Vellai padanam*⁴(white arsenic sublimatus), *thippili Moolam*⁵(root of long pepper) ,*Mathirai*⁶ (Tablet).

Historical Background of *Kudori*:

Kudori in Classical Texts ;

The surgical text references to *Kudori* are found in *Agathiyar Nayana Vithi* and *Nagamuni Nayana Vithi* These references illustrate *Kudori* 's position as an emergency medicine technique when conventional internal drugs could not act rapidly.

The classical verse:

“குட றோரி மருந்தோய்க் குளம்பிறை கோரியமோம்”

-நிகண்டு 7ம் அங்கம், நிகண்டு சோஸ்திரம்.

Textual references:

- ✓ Snakebite & animal bites – Venom neutralization.
- ✓ Epilepsy, fainting, coma – Stimulation of vital centres.
- ✓ Psychiatric disturbances – Balancing deranged vatham and pitham.
- ✓ Eye diseases – Incision near the forehead or head to relieve acute conditions.

Other names:

According to various Siddha literatures, *Kudori* is referred by multiple traditional names due to its regional adaptations and application purposes.

1. *Uchi keeral*
2. *Kudori adal*
3. *Kudori vaithal*
4. *Kudori vaithiyam*
5. *Vishakal vaithiyam*
6. *Nanjukal vaithiyam*
7. *Kudoriyaaduthal*
8. *Kuduvai poraiyidal*
9. *Kudoriyiduthal*
10. *Kudoram*

Surgical Instruments:

Kudori Tool Mentioned in Agathiyar Nayana Vithi 1 ¼ inch width & 7.5 inch length These instrument resembling an axe. The text also mentions another instrument called “பிறுமோ” (Piruma) with a length of 5 inches and a weight of ¼ palam, though its specific uses are not clearly described.

- *Kudori* – axe-like instrument, 7.5 inches long and ½ *palam* in weight.
- *Piruma* – a secondary instrument, 5 inches long and ¼ *palam* weight.
- Alternative tools: Sharp Knife, Sharp Coconut Shell, Sharp Glass, Paddy (grain of rice), Teeth of snake

Heating agents: hot stone, neem or Etti wood stick for post-procedure cauterization.

Common sites:

It is performed at specific anatomical location depending on the disease conditions and accessibility of the blood vessels

- ✓ Vertex and back of the head
- ✓ Cheek
- ✓ Chest
- ✓ Neck
- ✓ Nails (both hand and feet)
- ✓ Thighs and shoulder
- ✓ face and feet

Majorly, The area of forehead and vertex of the head for emergencies and Back of neck, cheeks or chest for accessible vascular areas.

PROCEDURE:

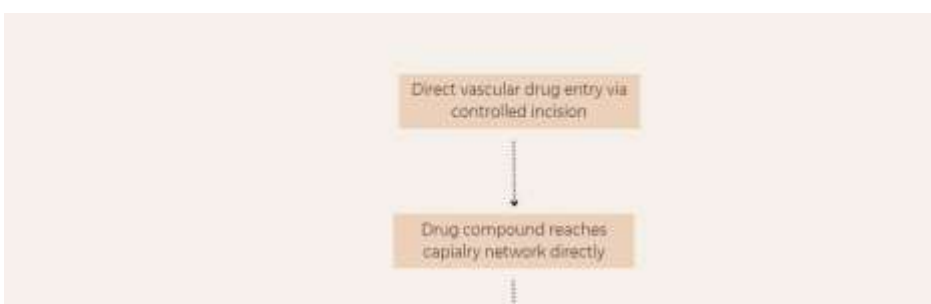
The procedure is based on inducing vascular access through minor cut. Superficial blood vessels of the body to facilitate the direct application and absorption of medicinal substances into the bloodstream so that medicines placed at the wound site mix directly with circulating blood, enhancing therapeutic efficacy.

1. Hypothesized Therapeutic Mechanism :

This procedure involves creating superficial or deeper wounds in specific areas of the body to enable direct administration of medicines into the bloodstream.

In areas such as the forehead, the superficial blood vessels beneath the skin are compressed and expanded, causing them to swell slightly above the skin surface.

The principle of Kudori involves direct vascular drug entry and controlled incision Allows drug compound to reach capillary network directly.



General *Kudori* Procedure (incision + application of medicine)—Fainting, coma, epilepsy Induces bleeding → toxin removal, improves blood flow, enhances CNS stimulation via medicinal absorption

2. Instruments:

Kudori: A sharp-pointed traditional instrument.

Knife: Used as an alternative for making linear incisions.

Rice grain point: A smaller, sharper tool used for creating superficial scratches.

3. Method:

➤ Identification of Site:

- Forehead and scalp- vertex of the head (commonly used in emergencies).
- It can also be done on the fleshy areas at the back of the neck and other suitable parts of the body where the skin and blood vessels are accessible.

➤ Preparation:

Superficial blood vessels are compressed and expanded until they swell above the skin surface.

➤ Application of *Kudori*:

- The sharp point of the *Kudori* is positioned over the swollen vessel.
- The sharp point penetrates the vessel, creating a wound of controlled depth. And it's Depth Control Determined by the height of the flick.
- The handle of the *Kudori* is held firmly at the opposite end while the sharp point is lifted to a certain height and then flicked downward, puncturing the vessel.
- The depth of the wound depends on the height from which the flick is made.
- Small wounds are made using fine points, while larger wounds require broader points.

➤ Medicine Application:

Once the wound is created, medicines are placed directly onto the wound and bandaged.

This allows medicines to mix directly with the blood, similar in principle to certain modern medical methods of local or systemic drug delivery.

4) Alternative Methods :

Knife incision: Creating wounds of specific depth and length, followed by medicine application.

Rice grain scratching: Superficial scratches are made, and medicine is rubbed or placed onto the skin.

Coconut Shell : involves scratching the skin with the sharp point of a then rubbing or placing medicine into the scratch.

. Another variant involves Snake teeth/surgical knife is used for piercing the skin by to a size of paddy to cause bleeding and the medicine is laid and Then this site is burnt with hot stone or wooden stick of neem or nux-vomica. The heat produced by this Process penetrates the body and act as a catalyst to Merge the drug into blood stream

S. No	Disease	Site of incision	Medicine

1.	Scorpio sting	<i>Ucchi</i> (vertex of the head)	<i>Thaivelai saaru</i> (Extract of <i>Cleome gynandra</i> L.)
2.	Delirium	Vertex of the head	<i>Sanni kudori</i>
3.	All types of venom	Occiput, Vertex of the head, forehead and cheeks	<i>Nanjirpaindhan mathirai</i>
4.	Russell viper 16 toxic bite	Vertex of the head	<i>Thavasur murungai saaru</i> (Extract of <i>Justicia tranquebariensis</i>)
5.	Snake venom	Occiput, Mid - cranial point	<i>Kudori thylam</i>
6.	King cobra toxic bite	Mid of the forehead	<i>Kudori</i>
7.	<i>Sukiran</i>	2 finger above the eyelid	Incision only
8.	Indian cobra	Vertex of the head	<i>Sagala vida kulambu</i>
9.	All type of venom	Occiput, Vertex of the head, forehead and cheeks	<i>Malaikkathan kuligai</i>
10.	Russell's viper, Cobra and Common krait	Vertex of the head	<i>Sanjivikarana thylam</i>
11.	<i>Pitha kirigai</i>	Vertex of the head	<i>Erukam palai thylam</i>
12.	<i>Neer parparogam</i>	Mid of the eyebrow	<i>Kudori</i>

13.	Snake venom	Vertex of the head - Grain of rice	<i>Thaivelai saaru</i> (Extract of <i>Cleome gynandra L.</i>)
14.	<i>Pitham</i>	Vertex of the head	Extract of whole plant of <i>Solanam trolobatum L.</i> , <i>Phyllanthus niruri L.</i> , <i>Gymnema sylvestre</i> with equal amount of lemon extract
15.	<i>Thasai parparogam</i>	Mid of the eyebrow	<i>Kudori</i> , After procedure Salt should be applied
16.	Venomous bite	Vertex of the head	Grinded Paste of <i>sengodiveli</i> root (<i>Plumbago indica</i>)
17.	Snake bite	Vertex of the head - ricegrain	<i>Thaivelai saaru</i> (Extract of <i>Cleome gynandra L.</i>)
18.	Any venomous bite	Vertex of the head	<i>Sarvavida marundhu</i>
19.	<i>Sanni</i>	Vertex of the head	<i>Kodali kudori</i>
20.	<i>Sanni</i>	Vertex of the head	<i>Kudori anjanakuligai</i>
21.	Snake bite	Vertex of the head	<i>Kudoriyadi chooranam</i>
22.	<i>Sanni</i> ,Vali-5 types, Snake bite	Vertex of the head	<i>Kudori sanni kulambu</i>
23.	Snake venom	Thighs ,face,feet and shoulder	<i>Kudori</i>

24.	Head ache	Vertex of the head	<i>Kudori sanni kulambu</i>
25.	Spider,Scorpio sting,regional reptile bite	Vertex of the head	<i>Kudori kulambu</i>
26.	<i>Ucchi kuthu</i>	Vertex of the head	<i>Kudori sanni kulambu</i>
27.	<i>Aravu kadi</i>	<i>Kudori</i>	<i>Ninba ennai</i>
28.	<i>Sagala vidam</i>	Mid cranial point	<i>Ulli,vasambu, nallennai serndha thailam</i>
29.	Nethra Vaayu	<i>Kudori</i>	No medication
30.	Mayakkam	Vertex of the head	<i>Kudori sanni kulambu</i>
31.	All type of poison	Vertex of the head	<i>Rashathik kudori</i>
32.	Venomous bite	Cranial point	(Extract of <i>Cleome Gynandra</i> L.) And quick silver)
33.	Snakebiteinduced unconsciousness	Vertex of the head	<i>Sarparaja Mayanam</i>
34.	Russell's viper bite	Vertex of the head	<i>Chithirai moolam, markarai sernthu Kudori thylam</i>
35.	Monkey bite, Ghost dog bite (<i>Atelocynus microtis</i>)	Cranial point	<i>Vida kuligai</i>

36.	Russell's viper, common krait,	Vertex of the head	<i>Vida kuligai</i>
37.	Limbless reptile bite	Vertex of the head	<i>Kalarchi parupu, Velaiparuthu saaru kudori thailam</i>
38.	Limbless reptile bite	Vertex of the head	<i>Chithiraimoolam, marukarai serntha Kudori thylam</i>
39.	Limbless reptile bite	Innerlayer of scalp	<i>Sadhurakalli Kudori thylam</i>
40.	Limbless reptile bite	Vertex of the head	<i>Senaiyuruvi serntha Kudori thylam</i>
41.	Eye diseases and headaches	Forehead veins	<i>Pill made from grinding mayilthutham and with Kuppaimeni saaru,(Coppersulphate, calamine)</i>
42.	Aravam (limbless reptiles toxin)	Vertex of the head	<i>Kudori thylam</i>
43.	<i>Anal kirigai</i>	Vertex of the head	Fresh cow dung
44.	All types Snake venom	Vertex of the head	<i>Bharani marundhu</i>
45.	Adakkam elupathulal	Vertex of the head	<i>Kudori kuligai</i>

Traditional assessment of Poisoned person and Kudori's role in revival:

In Siddha toxicology, determining the presence of life in a poisoned or unconscious individual is essential before initiating emergency revival procedures such as Kudori Maruthuvam. Ancient texts provide specific observable signs to assess vital activity.

Signs Indicating Presence of Life:

Eye movement: The eyes may turn upward, downward, or sideways.

Blood flow test: When gentle pressure is applied near the wound, a small amount of red blood oozes out.

Nail bed color: Reddish hue in the nail beds(blood circulation)

Local reaction: The bitten area appears swollen, reddish, and warm to touch.

Medicinal response: If applied medicine produces a visible or sensory reaction, life remains.

Fluid tests: When The person submerged in water, if the person shows any minor reflex or when the juice of Erukku (*Calotropis gigantea*) or Thaivelai (*Cleome gynandra*) is poured into one ear and it emerges through the other, it signifies that life is still present and Kudori can be performed to stimulate revival.

Safety, Contraindications & Precautions:

Contraindications: Anemic patients, bleeding disorders, Cough, Tuberculosis, jaundice, Anemia, Epilepsy, vomiting, Ascites, hypertension, diarrhea

Exceptions: Kudori is not needed for snakebites on the leg as the venom spreads through the blood, and direct application to the wound might not be effective.

Possible complications : excessive bleeding, infection.

Emphasize sterilization & safety measures

Parallels in Other Medical Systems:

Ayurveda: Raktamokshana (bloodletting) is comparable to Kudori, where incision or leech therapy is used to expel toxins.

Unani: Fasd (venesection) involves cutting a vein to drain vitiated blood.

Traditional Chinese Medicine: Bloodletting acupuncture at specific points resembles *Kudori's* principle of incision for therapeutic release.

Japanese medicine (kampo): A relaxation incision for a snakebite is a surgical procedure that involves making small cuts in the skin to relieve pressure, flush out venom, and improve drainage in severe cases of compartment syndrome.

Modern medicine: *Kudori* is comparable to modern Modern medicine's direct injection of medicines into the bloodstream or tissues, offering benefits like quicker absorption and faster action, especially in severe or emergency situations like shock or coma.

This comparative part of alternate medicine *Kudori* is part of a universal ancient surgical approach in many healing traditions, highlighting its relevance in toxicological and emergency care.

Conclusion:

In an era where modern emergency medicine dominates clinical practice, *Kudori Maruthuvam* represents a unique surgical and emergency intervention in Siddha medicine. It highlights the Siddha literature of drug-blood Direct interaction and rapid therapeutic delivery. Rediscovering and standardizing *Kudori* can bridge traditional wisdom and modern science, reinforcing possibilities for integrative approaches in emergency care. This paper attempted to explore the background, tools, procedures, and medicinal applications of *Kudori*, thereby highlighting its relevance as an underrated yet valuable emergency treatment in Siddha medicine.

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