

A literature review on keeral (incision) in Siddha system of medicine.

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ABSTRACT : The Tamil culture have unique medicine system named as "Siddha". This review was to revealed the compilation of keeral (incision) in classical Siddha literatures especially numerated literature evidences in Nanju Maruthuvam (Siddha Toxicology). The detailed search done from books of various libraries. The kudoori is the medication procedure and it is one of the part in keeral. This is used in emergency conditions like poisonous bites. This review showed that different methods, indications, contraindications procedures of keeral.

KEYWORDS: Kudoori, Nanju Maruthuvam

INTRODUCTION

The Tamil culture has unique medicine system named as "Siddha". The Siddha system of medicine is made by great *Siddhars*. Based on treatment aspects Siddha system of medicine has three types, Such as *Manidar maruthuvam* (General Medicine), *Vinnavar maruthuvam* (Divine Medicine) and *Asura maruthuvam* (Surgical Medicine). [1] Medicine prepared by common people is known as *Manidar maruthuvam*. Medicine prepared by trained person in treating chronic incurable illnesses is known as *Vinnavar maruthuvam*. Medicine or procedures including surgical and post surgical practice by well-trained person is known as *Asura maruthuvam*. When *Manidar maruthuvam* and *Vinnavar maruthuvam* fails to treat a disease, in such case, *Asura maruthuvam* plays a major role in treating disease. This *Asura maruthuvam* has three subtypes such as *Aruvai* (Siddha surgery), *Akkni* and *Kaaram*. [1] *Keeral* means making an incision. [2] It is one type of the thirteen varieties of *Aruvai* and it is in one of the type of 32 varieties of Siddha external therapies. [3] The ancient people knew that blood is renewed. When they found that an ailment has arisen due to derangement of blood impurity, they restored to bloodletting on a limited scale at a time ensuring generation of fresh blood by the system. [4] *Keeral* is the procedure that is easiest and useful method in bloodletting. [3] When that seven physical constitution are suddenly affected, we can apply *Keeral* in emergency condition. [5] *kudoori* means making an incision on the crown of head or Other part of body and inserting medicine for purposes of curing dangerous diseases. [2] So, the *Kudoori* is the medication procedures. It is one of the parts in *Keeral*. [6] The *Kudoori* is best method to increase the absorption of medicine in blood circulation. This technique is more or less equal to method of intravenous injection in modern system of medicine. The *Kudoori* is famous in the Siddha toxicology in ancient age. Siddha system of medicine have many literature evidence for *Asura Maruthuvam* especially *Keeral / Kudoori* (Incision).

INDICATIONS FOR KEERAL.

Katti (Lump), *Pambu kadi* (Snake bites), *Sanni* (Delirium), *Koppalam* (Blister), *Kirigai* (Insanity), *Thalaivali* (Headache), *Kan Noi* (Eye disease), *Kathu vali* (Ear ache), *Nakku Noi* (Tongue diseases), *Yanaikaal* (Elephantiasis), *Veekam* (Inflammation), *Vatham* (Arthritis), *Sori Sirangu* (Skin rash), *Vithai Noi* (Disease of the scrotum), *Varmam*, *Thelkadi* (Scorpion bite), *Mayakkam* (Giddiness), *Athirchi* (Shock). [6,5,7,8]

CONTRAINDICATIONS IN KEERAL.

Irumal (Cough), *SuvasaKasam* (Tuberculosis), *Kamalai* (Jaundice), *Pandu* (Anaemia), *Valippu* (Epilepsy), *Vanthi* (Vomiting), *Peruvairu* (Ascites), *Athikuruthi azhutham* (Hypertension), *Athisaram* (Diarrhoea). [1,5]

DISSENTITLE IN KEERAL.

Keeral is not advised in Newborn, Infants, Pregnant women, Lactating mother, People under influence of alcohol, Person cured from illnesses, Pavid person, Sterility. Even though *keeral* is contraindicated to the above mentioned conditions, we can do *keeral* in emergency situation like poisonous bites. [1]

INSTRUMENTS USED IN KEERAL.

- *Nel* (Paddy). [7,9]
- *Mulvaangi* - (Length 6-inches, Breadth 1-inch, Weight 5.1-gm). [1]
- *Kudoori* - [Length 7.5-inches, Weight - more or less 10-gm, It looks like axe.] [1]
- *Katthi* (Knife) - [Length 6-inches, Breadth 1-inche.] [1]
- *Paambu pal* (Teeth of snake). [7]
- *Ilavu mul* (Thorn of *Bombax malabaricum*). [10]

INSTRUCTIONS FOR USING INSTRUMENTS

Wherever the incision needs to be applied, always use weapons that are not too long, not too thick, not curved, not broken, and not injuring in mysterious places. In Bony areas of body, the tools to be used have a bulky handle and a tooth-like shape about half an inch in diameter. In case of ear tumour incision, the measurements of instruments should be 4-inches long, half inch circumference. But only half inch of instrument should be inserted in the ear. [6]

PROCEDURE.

The vein which is to be incised should be dilated and exposed. After that the incision process should be carried out. Incised mark should not be oblique and too depth. It must be straight and the cut should be done up to down evenly. Because if it is not done like that there is a chance of bleeding and increased loss of blood. The knife when is used for incision should be sterilized and sharp. [1] The veins should be dilated with instruments called *virigai* having the tip like paddy, Yava wheat like instruments should be made, where the muscles is dense, and Paddy size incision is to be applied in other places. [6] The bite spots should be incised with 1cm in breadth and 2cm in depth. Incision with a sterilized sharp knife across the width. Care should be taken not to cause much damage to the blood vessels and muscles that follow the skin when incision made. [11]

AREAS IN HUMAN BODY TO DO KEERAL

Skin, Hands, legs, Scalp, Forehead, Inion, Cheeks, Dilated veins, Anterior part of the lumps. [6,8,12,13]

INACCESSIBLE DURATION FOR KEERAL.

During cloudy, Windy, Cold weather. Because, the blood does not come out properly in these time. In case of bleeding present in these time blood clot will be form quickly and that clot close the mouth of incised area. [1,5]

PRECAUTIONS

Bleeding from incised areas should be stop within 48 minutes. [6] incised part is bandaged by moistening cotton with oil. [6] If heavy bleeding is present, it should be stop with astringent drugs. [1] In case bleeding didn't stop by astringent using drugs, go to cauterization method. [1]

KEERAL FOR VARIOUS DISEASES AND CONDITIONS.

A) IN KATTI (LUMPS):

In lumps where there is no opening, an incision is made with a sterile knife and a blend of *Shorea robusta* (*Kungiliyam*) powder with fresh slaked lime and sesame oil is applied and a bandage is made. The entire pus and blood is removed and wound heals in three days. The same application is very useful in cut injuries. [4] When lumps leads to pus and dangerous to health, we incised the lumps with sterilized knife to remove pus and lumps. [14]

B) IN NAGASUTRU (PARONYCHIA):

If there is a paronychia with more pus, it can be incised and collect pus. Then clean the nail and make a wound healing process. [9]

C) IN KUTTAM (LEPROSY):

Incision on forehead once in six months for full blown leprosy and drain out the unpurified blood from hands and legs. It is good one for leprosy patients. [9]

D) IN SANNI (DELIRIUM):

The *kudoori sannu kuzhambu* is a medicine. This is used to treat a disease such as delirium, faint, headache and snake bite. The tail part of paddy is used to incise on scalp. Then apply above medicine and provide some heat on the incised area. It will cure above mentioned diseases and conditions. [7] The *kudoori marunthu* is a medicine. Which is mixed with juice of *kuppaimeni* (*Acalypha indica*) and bandaged in incised areas of affected part in body. This medicine is used to treat diseases such as delirium. [15]

E) IN KIRIGAI (SCHIZOPHRENIA):

In Siddha, *kirigai* has eighteen types. *Pitha kirigai* is one such type. In this condition tail part of paddy is used to incise on scalp and apply dung on the incised area. [9]

F) IN KAN NOI (EYE DISEASE):

If eye is affected by *Vatham* it is called as *Sukkiran*. Two fingers above the eyelid on the forehead is selected when the head squeezed the blood vessel would dilate. Mark that blood vessel and make an incision. It remove the pain in *Sukkiran*. [16]

G) IN PULUVETTU (ALOPECIA):

If there is fungal infestation on the head or eyes, incised the area with a fine thorn of *mulilavu* (*Bombax malabaricum*) and rub with *gorosanam* (*Bouinum purifactum*) powder. Do this procedure for 3 days. The hair grows and get cure from that fungal infestation. [10]

TABLE: 1 LIST OF MEDICINES FOR KEERAL(INCISION) IN POISONOUS CASES.

S.NO	MEDICINE	INSTRUMENT USED FOR KEERAL	INCISED AREAS TO BE IN USED	USES
1	<i>Sanjeevigarani thailam</i> . [12]	knife	Scalp	poisonous bite
2	<i>Thavasumurungai</i> (<i>Justicia tranquebariensis</i>). [17]	knife	Scalp	16 <i>viriyani kadi</i> (viper bite)
3	<i>Sagala sarpavishathukkum marunthu</i> . [14]	knife	Scalp	poisonous bite
4	<i>Kudoori kulambu</i> . [18]	knife	Scalp	poisonous bite.
5	<i>Kudoori thailam - I</i> . [18]	Kudoori	Scalp,	poisonous bite.

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6	<i>Kudoori thailam-2</i> . [18]	Kudoori	Scalp	poisonous bite.
7	<i>Kudoori thailam-3</i> . [18]	Kudoori	Scalp, shoulder	poisonous bite
8	<i>Kudoori thailam-4</i> . [18]	Kudoori	Scalp	Poisonous bite
9	<i>Sarparaja mayanam</i> . [8]	knife	Scalp	Cobra bite
10	Preparation with <i>Poondu (Allium sativum)</i> , <i>vasambu (Acorus calamus)</i> and sesame oil (<i>Sesamum indicum</i>). [8]	knife	Scalp	Vipers bite and scorpion bite (<i>Thel</i>).
11	Preparation with <i>alinji Vithai (Alangium salvifolium)</i> , <i>mudakaruthan (Cardiospermum halicacabum)</i> , <i>uthamani (Pergularia daemia)</i> , cow's milk. [8]	Kudoori	Scalp, inion	Cobras bite (<i>Naagam</i>)
12	<i>Nanjirpainthan mathirai</i> . [12]	knife	Forehead scalp, inion, leg.	Poisonous bite
13	<i>Rashathi Kudoori</i> . [10]	Kudoori	Scalp	Poisonous bite
14	Preparation with <i>nalvelai (Cleome gynandra)</i> & Mercury. [8]	knife	Scalp	Cobras bite (<i>Naagam</i>)
15	<i>Nalvelai (Cleome gynandra)</i> . [10]	knife	Scalp	Poisonous bite

DISCUSSION:

The review showed that different methods of *Keeral* (incision) found in Siddha literature. From this review six types of instruments were used in *Keeral*, mainly knife and *Kudoori*. The most common treating conditions were poisonous bite. The most number of *Keeral* are said in Siddha text of *Sarabenthira vaithiyamuraigal*, *Visha vaithiya aaruda noolgal*, *Visha vaithiya sindhamani* and *Agapura marunthugalin ilakkanamum vilakkamum*.

CONCLUSION:

This documentation will help as a reference for emergency need in case of poisonous bite. Therefore this research provided a need of clinical assessment of Siddha management in modern scientific way and introducing it to global level in future.

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