

A LITERARY REVIEW OF SIDDHA TREATMENT FOR MECHANICAL TRAUMA

JENIFER VIMALA M*

Department of Nanju Maruthuvam, GSMC, Tirunelveli, Tamil Nadu, India. Email: jenifervimala96@gmail.com

Received: 11 October 2022, Revised and Accepted: 03 February 2023

ABSTRACT

Siddha is one of the oldest traditional medical systems followed in the Southern part of India. Herbal medicines and their preparation for the wound healing in mechanical trauma are found in Siddha texts. Mechanical trauma is an injury or wound to a living body caused by the application of external force or violence. Both internal and external medications used for the treatment of mechanical trauma were collected and compiled from this work. The treatment for specific wounds such as abrasion, burns and scalds, contusion, incision, and lacerated wounds in mechanical trauma is briefly discussed in this work. Of these, even simple herbs were used to arrest bleeding from wounds and also cures severe wounds are noteworthy. From the literary evidences, it is clear that ancient people used the medicinal plants and their resources in the treatment and management of mechanical trauma as the first hand medicine. This work paves the way for the future researchers to concentrate on mechanism of action of these medications for its specific role in wound healing will strengthen our Siddha system.

Keywords: Siddha system, Mechanical trauma, Medicinal herbs, Minerals, Siddha medications, Wound healing.

© 2023 The Authors. Published by Innovare Academic Sciences Pvt Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>) DOI: <http://dx.doi.org/10.22159/ajpcr.2023v16i6.46582>. Journal homepage: <https://innovareacademics.in/journals/index.php/ajpcr>

INTRODUCTION

Mechanical trauma, an injury or wound to a living body caused by application of external force or violence [1]. In India, traumatic injuries account for about sixteen percent of the total disease burden, lowering people's quality of life [2]. Annually more than 5 lakh people are harmed in the domestic mishaps such as cuts, wounds, abrasions, fractures, contusion, burns, and lacerations [3]. The wounds from incision, burns, scalds, and abrasion are prevalent in women during household chores. Men frequently get contusion, fractures, and lacerated wounds while doing domestic and occupational tasks. Children, adults, and even elders get harmed with minor injuries during their everyday activities. The majority of them are considered mild and do not require medical attention [4]. Natural herbs with medicinal qualities are the greatest blessing to the world. Medicinal plants accelerate the wound healing mechanisms by arrest bleeding, enhance individual's own immune system, and control infection [5]. Siddhars have mentioned that some of the medicinal plants have the therapeutic potential to heal the wounds. Since all the medications were foretold by the Siddhars, Scientific evidence is needed for the global acceptance [6]. As per the Siddha text, a wound (*Kāyam*) is caused by any hurt in the epidermis or dermis layer of the skin that results in the discontinuation of cells or it lacerates the internal organ due to any external forces, weapons or tools such as knife, rod, and stick [7]. This article particularly spots the remedy of the acute minor wounds due to mechanical trauma.

Styptic medicines

Arrest bleeding from the wounds is the foremost step in the treatment of any traumatic injury. Commonly many plants are styptic in nature, Siddha system using these medications to stop bleeding and also in further management of wound healing process [8].

- *Arukampul* (*Cynodon dactylon* L)-leaf extract arrest bleeding and enhances wounds healing [8].
- The leaf juice of *Akatti* (*Sesbania grandiflora* L) externally applied stops bleeding and avoid pus collection [9].
- The bark decoction of *Punṇai* (*Calophyllum inophyllum* L) stops bleeding [10].
- *Utiramaṭṭakkī cāru* is used as internal and external medicine to stop bleeding [11].

Abrasion

- The seed oil of *Āmaṇakku* (*Ricinus communis* L) is used upon abrasion wounds [8].

- Topical application of *Mañcaḷ* (*Curcuma longa* L) greatly heals the wounds [12].
- *Kaṭukkāy* (*Terminalia chebula* Retz) powder heals abrasion [8].

Contusion

- Root tubers and leaves of *Antimalli* (*Mirabilis jalapa* L) used to reduce contusion [8].
- Topical application of *Maramaṇcaḷ* (*Coscinium fenestratum* Colebr) heals the contusion and lacerated wounds [12].
- *Ayaṇa mukkūṭṭu eṇṇey* is used externally to cure contusion and other injuries [13].
- Fomentation with lemon and sesame oil greatly reduces bruise and inflammation [11].
- Contusion and unhealed wounds are treated with leech therapy [14].

Punctured wound

- The latex of *Nantiyāvaṭṭam* (*Tabernaemontana divaricata* R. Br) is used to cure wounds and prevent sepsis formation [12].
- *Peruntētkoṭukku* (*Heliotropium indicum* L) leaves are externally used to heal wounds [12].
- *Kariya parpam* is given as both internal and external medicine for wounds [15].
- The medicated oil - *Kuṇṇivēr tailam* is used to treat wounds [13].
- Punctured wounds can be treated with *Raca parpam* [15].

Inflammation

- External application of *Amukkīrāk kiḷaṅku* (*Withania somnifera* L) powder reduces swelling [8].
- Fomentation can be given by *Puḷi* (*Tamarindus indica* L) and sodium chloride (*Kaṇṇiyuppu*). It intensely reduces pain and swelling in traumatic condition [16].
- *Pacuñcāṇam* (Cow dung) fomentation on wounds stops bleeding and reduces inflammation [17].

Incised wound

- Cut injury or incised wounds which are caused by the sharp-edged weapons can be treated with the leaves of *Arivāḷ mūkkuppacciḷai* (*Sida acuta* L) [8].
- *Raca parpam* is given internally to treat incised wounds [15].
- *Cañcīvit tailam* is externally used to treat incised wound [18].

Fracture

- The *Piraṅṅai* root (*Cissus quadrangularis* L) is given internally for the management of fracture [10]
- *Mañciṅṅai* root (*Rubia cordifolia* L) improves fracture healing [10]
- The leaf extract of *kōṭakacālai*, egg white, and turmeric powder (*Justicia procumbens* L) is used as bandage to correct fractures [9]
- *Cantaṅṅai* tailam, *Ēlāti* ney, *Karpūravallit* tailam, *Tacapuṣpāti kacāyam*– Internally given for fractures [18]
- *Ālampāl eṅṅey*, [11] *Cittiramūli eṅṅey* [18], *Taruṅa irācāṅka eṅṅey* were externally indicated for fractures and its wounds [13].

Lacerated wounds

- External application of *Kācā* (*Memecylon umbellatum* Burm) barks cures lacerated wounds [9]
- *Kiṅṅāyṅṅai* (*Phyllanthus amarus* Schuma and Thonn) leaves used in the management of wounds due to laceration [8]
- The leaves of *Mācippaccāi* (*Artemisia nilagirica* Pamp) are soaked in water and used to cure lacerated wounds [10]
- *Piciṅṅai* (*Litsea chinensis* Lam) Bark is used in the treatment of lacerated wounds [12].

Burns and scalds

- The seed oil of *Alici vitai* (*Linum usitatissimum* L) or *Teṅṅumaram* (*Cocos nucifera* L)
- This oil is applied locally to cure burns [8]
- Topical application of *Kōṭumai* (*Triticum aestivum* L) flour heals burns and irritation [8]
- *Mā* leaves (*Mangifera indica* L) or *Verrilai* (*Piper betle* L) leaves can heal burns when used as bandage [10]
- Topical application of leaves and seeds of *Paruppukkīrai* (*Portulaca oleracea* L) or the fresh tubers of *Uruṅaiṅṅai* (*Solanum tuberosum* L) cures the burns [8]
- The *Parutti* (*Gossypium herbaceum* L) used in bandaging also helps in faster wound healing [12]
- *Tēṅ* (Honey) is applied over burns. It prevents the occurrence of boils over it [17].

Heals traumatic wounds in general

- *Marutu* (*Terminalia arjuna* Roxb) fruit used to treat severe wounds [10]
- The medicine *Palagarai parpam* is used to treat all kinds of wounds such as incision, contusion, laceration, and punctured wounds when it is applied externally with different birds' egg yolk [17]
- *Vallārai* (*Centella asiatica* L) heals wound faster [10]
- Oil prepared from *Paṅṅai* ney (Pig fat) externally used to heal wounds faster [17]
- *Cayarācāṅka kuṅṅai*, *Kuṅṅai ilēkiyam* [18], *Kāya irācāṅka eṅṅey* [13], and *Māvilāṅku cūraṅam* [18] are some of the internal medicine to cure any kind of severe wounds
- The medicated oil such as *ṅṅai eṅṅey* [11], *Vacaveṅṅey* [11], and *Amirta mukūṅṅai eṅṅey* are used externally to cure the wounds [18].

DISCUSSION

Both internal and external medications used for the treatment of mechanical trauma were collected and compiled from this work. Those medications were listed out from various Siddha texts for its wound healing nature can be categorized into single medicinal plants, minerals, and animal products based on its sources. The treatment for

specific wounds such as abrasion, bruise, burns and scalds, contusion, and lacerated wounds in mechanical trauma is briefly discussed in this work. Of these, even simple herbs were used to arrest bleeding from wounds and also cures severe wounds are noteworthy.

CONCLUSION

From the literary evidences, it is clear that ancient people used medicinal plants and their resources in the treatment and management of mechanical trauma as the first hand medicine. This article compiles and elaborates the usage of the Siddha medicines in the management of minor wounds during mechanical trauma. However, the majority of the traumas were preventable. Prior knowledge and awakensness can prevent and save the life particularly the traumas in home, workplace, and on road side. This work paves the way for the future researchers to concentrate on mechanism of action of these medications for its specific role in wound healing will strengthen our Siddha system.

REFERENCES

1. Reddy KS, Murty OP. The Essentials of Forensic Medicine and Toxicology. 34th ed. New Delhi: The Health Sciences Publishers; 2017. p. 183.
2. Kumarasamy H, Prabhakar VR. Prevalence and pattern of domestic injuries in rural area of Tamil Nadu. Int J Health Allied Sci 2016;5:215-9. doi: 10.4103/2278-344X.194084
3. Rehman T, Sulgante S, Kar Sekha S. Prevalence and pattern of domestic accidents in the field practice area of Jawaharlal Institute of Urban Health Centre, Puducherry: A cross sectional study. J Inj Violence Res 2020;12:1-10.
4. Tripura K, Das R, Datta SS, Bhattacharjee P, Singh B. Prevalence and management of domestic injuries among under five children in a peri-urban area of Agartala, Tripura. Health Agenda 2015;3:41.
5. Raina R, Parwez S, Verma PK, Pankaj NK. Medicinal plants and their role in wound healing. Vet Scan 2008;3:1-24.
6. Vimala JM, Thiruthani M, Rajarajeshwari A. A review of toxicity studies of siddha medicines in submitted dissertations in siddha post graduate institutions. J Trad Integrative Med 2021;4:449-61.
7. Sambasivampillai TV. Tamil, English Siddha Medical Dictionary. Vol. 2. Chennai: Department of Indian Medicine and Homoeopathy; 1936. p. 750.
8. Mudaliar MK. Siddha Gunapadam. Vol. 1. Chennai: Indian Medicine and Homeopathy Department; 1951. p. 1-409.
9. Kannusamy Pillai C, Vilakkam PG. Vegetable Kingdom. Chennai: B. Rathna Nayyakar Sons; 1998. p. 2-291.
10. Mudaliar MK. Siddha Gunapadam. Vol. 1. Chennai: Indian Medicine and Homeopathy Department; 1951. p. 721-851.
11. Thiyagarajan R. Siddha Maruthuvam Sirappu. 4th ed. Chennai: Indian Medicine and Homoeopathy; 2013. p. 179-91.
12. Mudaliar MK. Siddha Gunapadam. 2nd ed., Vol. 1. Chennai: Indian Medicine and Homeopathy Department; 1951. p. 541-675.
13. Chithambarathanupillai. S. Varma Odi Murivu Ganam. Chennai: International Institute of Thanuology; 1993. p. 92-119.
14. Uthamarayan KS. Siddhar Aruvai Maruthuvam. 6th ed. Sivakasi: The Naadar Press Limited; 2013. p. 16.
15. Thiyagarajan R. Guna Paadam Thathu Jeeva Vaguppu. Chennai: Indian Medicine and Homoeopathy; 1968. p. 123-254.
16. Thiyagarajan R. Gunapadam Thathu Vaguppu. Chennai: Indian Medicine and Homoeopathy Department; 2019. p. 467.
17. Sornamaariammal I. Gunapaadam Jeeva Vakuppu. Chennai: Shark Designing Centre; 2017. p. 187-253.
18. Mohanaraj T. Varma Odivu Murivu Saari Suthiram-1500. Vol. 1. Kanyakumari: ATSVS Siddha Medical College and Hospital; 2009.