



**THERAPEUTIC EFFICACY OF ATTAI VIDAL (LEECH THERAPY) IN THE
TREATMENT OF VARICOSE ULCER.**

**Loganathan Pon^{1*}, Mahalakshmi V.², Mahadevan M. V.², Periyasami D.², Samundeswari P.²,
Muthukumar N. J.³ and Banumathi V.⁴**

¹Post Graduate, Dept. of *Sirappu Maruthuvam*, National Institute of Siddha, Chennai, Tamilnadu, India.

²Lecturer, Dept. of *Sirappu Maruthuvam*, National Institute of Siddha, Chennai, Tamilnadu, India.

³HOD – Dept. of *Sirappu Maruthuvam*, National Institute of Siddha, Chennai, Tamilnadu, India.

⁴Director, National Institute of Siddha, Chennai, Tamilnadu, India.

***Corresponding Author: Dr. Loganathan Pon**

Post Graduate, Dept. of *Sirappu Maruthuvam*, National Institute of Siddha, Chennai, Tamilnadu, India.

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INTRODUCTION

The Siddha system of medicine, is an ancient traditional medicine with its unique principles and method of diagnosis, helps the people in treating the diseases for many centuries. In this system of medicine there are 32 types of internal and external medicines. Both are having equivalent therapeutic importance. Attai vidal (Leech therapy), one among the 32 types of External medicines, is an invasive procedure used to remove the toxins in diseased parts using leeches. It is one of the treatment modality to treat incurable or delayed curing diseases especially varicose ulcer, varicose eczema, abscess and sometimes acute conditions like contusion. Varicose ulcer is characterized by painless or minimal painful ulcers, often large and indolent commonly seen on the medial malleolus due to venous insufficiency. According to T.V.Sambasivampillai, Varicose ulcer is compared with *Narambu Kiranthi pun* as mentioned in siddha literature.

In modern system of medicine, lack of cost effective treatment is in practice for Varicose veins and its complications (Varicose ulcer). Conservative management with usage of socks, creep bandage are used and in chronic cases varicose vein surgery will be done to treat the ulcers. In such chronic conditions, Attai vidal (leech therapy) will be very effective.

MATERIALS AND METHODS

The following materials were required for the leech therapy,

- Leeches
- Storage containers for leech
- Kidney tray
- Tray
- Turmeric powder
- Aloe vera
- Alum water (Padigara neer)
- Normal saline
- Gloves
- Gauze roll
- Cotton
- Bandage roll
- Apron
- Head cap

Maintenance of leeches

The leeches were stored in a container containing fresh water. The ideal temperature was maintained with the air conditioner at 20-25° C. The water in the container was changed once in three days. The fresh and the used leeches were stored separately.

Leech application – procedure

The moderate sized, dark brown leeches were used for leech application. The leech application was categorized into.

1. Pre leech application procedure,
2. Leech application procedure,
3. Post leech application procedure.

A) Pre-leech application procedure

The selected leeches were purified by allowing it to swim in the turmeric water for 10 minutes and then into normal water for 10 minutes.

B) Leech application procedure

The leeches were allowed to bite around the ulcer. After sucking the blood, leeches fell down spontaneously. If the time exceeds one hour, leeches were induced to fall down by pouring turmeric water over it.

C) Post-leech application procedure

The leeches were allowed to vomit the sucked blood by sprinkling turmeric powder over the head portion. The sprinkling of turmeric powder continued until the leeches completely vomited. Then they were allowed to swim in the turmeric water for 10 minutes and into the normal water for 10 minutes.

Finally the leeches were stored in a separate labeled container.

Enrollment of a patient

The chronic varicose ulcer patients were screened for the co morbid and infectious conditions.

Procedure for the patient

A) Before the leech application

Before the therapy, the patient was informed about the procedure. The vital signs were seen for any abnormalities. Then the affected part of the patient was cleaned with the normal saline.

B) During the leech application

The vital signs were monitored during the procedure.

C) After the leech application

The bitten sites were cleaned and dressed with aloe vera pulp coated with turmeric powder. The vital signs were recorded for any abnormalities. After the procedure, the patients were under observation for one hour. They were checked for any abnormalities in the treatment site like excessive bleeding, pain, swelling etc.

Conduct of the study

Leech therapy was conducted at National institute of siddha, Chennai on 10 patients. Leech therapy was given to the screened patients at morning session. Depending upon the ulcer, 2-4 moderate sized leeches were used nearby and around the ulcer. According to the progress of the disease, 2-5 sittings were given. The time interval between the sittings was 10 days. The prognosis of the condition was assessed by Venous Clinical Severity Score (VCSS).

DISCUSSION

The non-healing varicose ulcer patients were treated in the OPD (Out Patient Department) for 2 months. The patients who showed poor prognosis in the OPD treatment were screened for the infectious and the comorbid conditions. The routine blood investigations were taken and checked for any abnormalities. The patient with chronic non-healing ulcers and normal investigations were included in the study.

Out of 10 patients, 6 patients volunteered when explained about the study. 4 patients involved in the study after the clarification.

Out of 10 patients, 2 patients showed increased blood pressure before leech application in the first sitting. After

1 hour blood pressure was re-checked. In one patient it was normal and for the other it remains the same. That patient was enquired for his activities. There we found the decreased sleep duration (5 hours). Then he was advised about the normal day to day activities and asked to come on another day for the procedure.

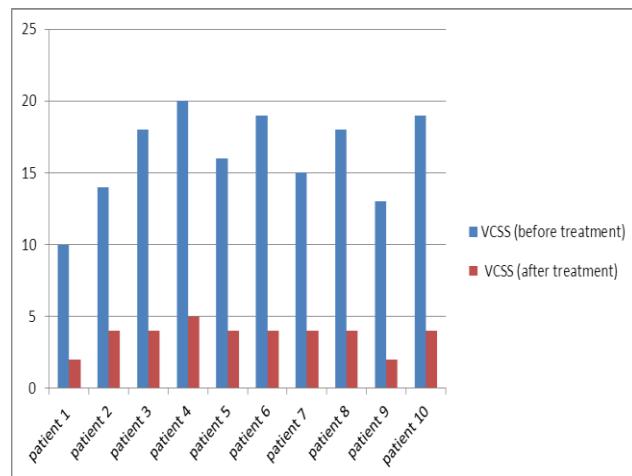
Out of 10 cases, the ulcer of one patient healed within a sitting. Ulcers of 4 patients healed in two sittings. Ulcers of 3 patients healed in the third and fourth sittings each. Ulcer of one patient healed in the fifth sitting.

There was no marked changes in the varicose veins in all the 10 cases. Pain and swelling were found to be reduced in all the cases in the first sitting.

Itching also found to be reduced in all the cases in first sitting. But 3 patients complained of itching, oozing and pain in the leech bited area after 2 sittings. It was due to the improper cleansing of leeches with the turmeric water in the pre leech application procedure during second sitting.

In three cases, hyperpigmentation around the ulcer were found to be reduced after 3 sittings.

The following chart shows the marked changes in the Venous Clinical Severity Score (VCSS).



SUMMARY

Out of 10 cases, ulcers of all the cases were healed. Other clinical symptoms like pain, itching and swelling were found to be reduced in single sitting. In 3 cases, Hyperpigmentation around the ulcer were found to be reduced after 3 sittings. The hematocrit remains unchanged after the therapy.

CONCLUSION

The leech therapy showed good results in treating chronic non-healing varicose ulcers. This therapy is painless and enhances healing process compared to other invasive procedures. It is also found that there is no marked changes in the hematocrit value. Thus Leech

therapy is therapeutically effective in the treatment of varicose ulcer without having surgical intervention.

RECOMMENDATIONS

As this case series study shows the effectiveness of leech therapy in treating non-healing varicose ulcers, it is recommended to conduct study on large sample size.

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