



TREATMENT OF DIABETIC FOOT ULCER USING MATHAN THYLAM DRESSING AND TRIPHALA CHOORANAM WASH- AN INEXPENSIVE YET EFFECTIVE TREATMENT.

Dr. Binthuja G Dharan^{1*}

^{1*}Junior Research Fellow, Peripheral Pharmacovigilance Centre, Kayamozhi, Tuticorin
binthujainthuja@gmail.com; ORCID: 0009-0003-3285-9442

***Corresponding Author:**

*Junior Research Fellow, Peripheral Pharmacovigilance Centre, Kayamozhi

ABSTRACT:

Diabetes presents as one of the basic threats to the people, as its complications extend to even neuropathies and osteomyelitis. 77 million Indians above 18 years of age suffer from Type II Diabetes Mellitus¹. The mean period since diabetes onset to the development of Diabetic Neuropathy is usually around 8.3 years². Diabetic foot ulcers develop mostly due to plantar pressure or small lesions that can occur due to some external object, disrupting the continuity in foot tissues.

This is a case report that expresses the results of using *Mathan Thylam*- An Oil- based drug that is commonly used for the management of wounds in Siddha System of Medicine. This report shows the effect of the external drug on a patient who presented with a foot ulcer with poor clinical outcome. This treatment, if executed in patients with diabetic foot ulcers, could prove as a cost effective and efficient, yet easy procedure for the caretakers of the patients.

CASE PRESENTATION:

A man in his early 60s, with a history of Type II Diabetes Mellitus since the past 22 years, presented with a pus filled foot ulcer of 3 cms diameter and 1 cm depth, at the Primary Health Centre. However, the patient exhibited no signs of pain and had only a spongy feel while walking. The location of the lesion was under the right first metatarsal joint, which is one of the core pressure areas of the foot.



On questioning, the patient expressed that he was under continuous medication for Diabetes since the onset 22 years ago and that the onset of numbness was around 10 years ago. Also, he has had repeated ulcerations, which took much time to heal, compared to others. He was not under medication for any other health conditions, except seasonal cold or fevers. While beginning treatment, his Routine blood Glucose level was 390 MG/dL in the month of October 2023. His HbA_{1c} was 11.8% and was under medication for Type-2 Diabetes Mellitus with the drugs T. Metformin 500mg thrice a day after food; T. Glimepride before food only in the morning; T. B Complex once a day at night. On questioning about the onset of the said condition, the patient said that it began as a small stone prick in the month of August 2023, while walking barefoot, which, he did not take into concern as there was not much pain. The wound advanced rather very fast, in both size and depth, bleeding whenever the wound hit a hard surface. Both pus formation and hardening of the scab was observed by the beginning of September 2023. Only after that, the patient visited the OPD for treatment. Application of Clotrimazole ointment proved ineffective, which could be seen as the wound was worsening



The patient could not afford to stay in admission for continued periods as he worked as a daily wage labourer. He was referred to Siddha OPD in the month of October 2023, as there were similar successful cases earlier, who were treated as OPD only. Only external therapies were followed, as the patient was in need of continued Allopathic drugs to keep his blood glucose levels under control. He did not have difficulty in walking, but was hesitant to walk due to fear of re infections.

INVESTIGATIONS MADE:

Doppler study made in the month of October 2023 indicated that his right leg showed no signs of narrowing or blockade of the veins or arteries. Blood tests revealed that his haemoglobin level was 11.7 gms/dL and wound swab culture showed presence of the Gram Negative bacteria *Burkholderia capacia complex* and resistance to Ciprofloxacin, Ampicillin and Amikacin.

DIFFERENTIAL DIAGNOSIS:

The diagnosis was differentiated from **varicose ulcers** by correlating with the report from doppler study and history of trauma of the right foot.

TREATMENT PROTOCOL FOLLOWED:

After admission for treatment, the patient was explained the procedure for the treatment and he agreed for the treatment and consented for the publication of the prognosis. Initial wound cleansing was made with Triphala Chooranam powder decoction and then dressing was made using Mathan Thylam. The Triphala Chooranam powder decoction was prepared by boiling 5 grams of powder in 240 mL of water and reducing it to 60 mL. The treatment was started on October 12, 2023 and the cleaning and dressing procedures were repeated three days once at OP.



OUTCOME AND FOLLOW UP:

The procedure was continued for a period of almost 4 months, between October 2023 and February 2024. Continuous and gradual improvement was observed in the ulcer. During every dressing, it could be visibly seen that the patient's ulcer showed granulation tissue, wound healing epithelialisation during the first three months and the size of the ulcer reduced in the last month.



DISCUSSION:

Mathan Thylam is a Classic Siddha Medical Preparation, that has been used since a long time for its potent wound healing³ and anti inflammatory properties⁴. The anti inflammatory and antibacterial effect of Triphala chooranam⁵ has been studied extensively. The results observed in the said patient showed fast improvement in terms of granulation and cutaneous tissue formation. Even when certain drugs were taken for control of blood sugar levels, not much changes were observed in the same, even during the treatment period. With this, we could positively infer that the improvement of the condition of the diabetic ulcer was only due to the Triphala chooranam wash and Mathan thylam dressing.

PATIENT'S PERSPECTIVE:

Treatment for the specified diabetic ulcer was fast and easy when compared to the grave complications that it possesses. Also, the cost of treatment was meagre, compared to the modern conservative treatments.

LEARNING POINTS/ TAKE HOME MESSAGES:

- The treatment of the patient began after two whole months since the onset of the ulcer. There might be better and faster improvement if the same is started immediately after the onset of the condition.
- An extensive case series study in similar patients is the next step that has been planned in order to know the success of the same drugs in treating other patients.

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