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## Diabetic foot ulcer treated with Jatyadi taila- A Case Study

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**Abstract** : This is a case of 38 years old male, diabetic patient complains of wound present on lateral Aspect of left lower leg(Above the lateral Malleolus) with Pus discharge, foul smell and discoloration of skin, Peripheral wound edema , Burning sensation in wound all time with uncontrolled diabetes mellitus diagnosed as Diabetic foot. Wound debridement was done and post wound management was carried under *Ayurveda* treatment procedures. Significant improvement seen in wound healing within 42days of treatment. In this case normal saline and *Jatyadi taila* showed its *Shodhana* and *Ropana* properties.

**Keywords:** Diabetic foot ulcer, Wound, Debridement, *Shodhana*, *Ropana*.

**Introduction:** A diabetic foot ulcer is a frequent complication of diabetes mellitus. 25% of diabetic patients will develop a DFU during their lifetime<sup>1</sup>. The risk of developing a diabetic foot increases with the time, due to ignorance of busy life style. The majority of wound cases are seen with uncontrolled diabetes. Majority of foot and leg amputations are performed on patient with DM. It is well known that 85% of amputations can be avoided with a holistic care plan<sup>2</sup> Diabetic patients are at risk from foot ulcerations due to both peripheral and autonomic neuropathy as well as macro- and microangiopathy. Peripheral neuropathy is the most common cause of diabetic foot ulceration. DFU first appears as blisters & sores (on numb areas of feet & legs) like on meta-tarso-phalangeal joints & heel region. Wounds are physical injuries that result in

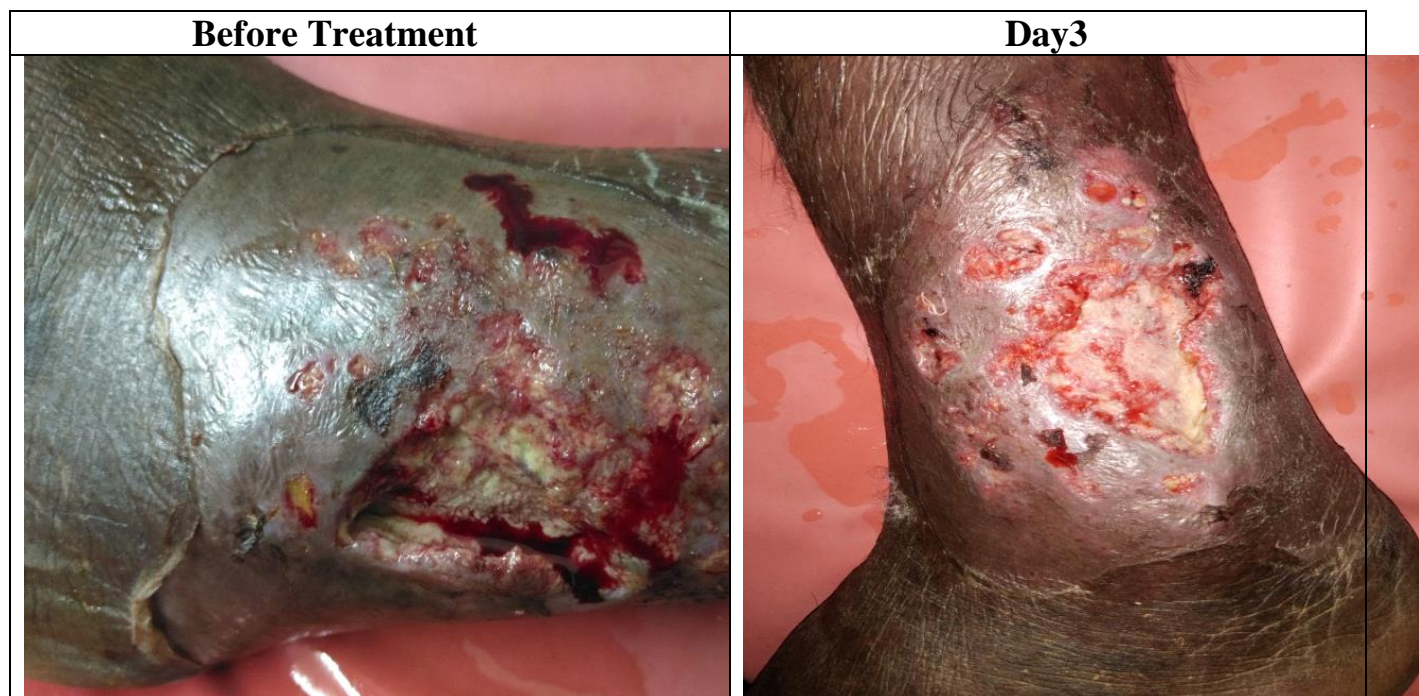
opening or break of the skin. Proper healing of the wounds is essential for the restoration of disrupted anatomical continuity & disturbed functional status of the skin. Wound healing is a complex but innate mechanism / phenomenon which works reliably most of the time & differs from patient to patient. The wounds are said to be non-healing when they do not improve after 4 weeks & do not heal after 8 weeks<sup>3</sup>. The recommended line of treatment as per modern medicine includes blood sugar control, removal of dead tissue & wound dressing. Diabetes in *Ayurveda* termed as *Prameha*. Type 1 (In Youth) and Type 2 (In overweight) were first identified as separate condition of *prameha* by *Acharya Charak* and *Acharya Sushruta* in 400-500 CE. All types (20 types)<sup>4</sup> of *Prameha* over the period, if left untreated or uncontrolled gets converted into *Madhumeha*<sup>5</sup>. In *Ayurveda*, clinical assessment of the wound is based on involved *Dosha* and *Dushya*, *Gandha* (odor), *Varna* (skin pigmentation), *Vedna* (pain), *Srava* (wound discharge), and *Akruti* (size) are main parameter to determine categorization of wound. Assessing of these criteria, *Vrana* (wound) should be manage with *Shodhana* (debridement of wound) and *Ropana* (wound healing) drug formulations accordingly involved *Dosha*. Either externally or internally, administration of the formulations play key role to get in *Samya-avastha* of affected *Dosha*.

**Case Report :** A 38 years old male patient, came to *Shalya tantra* OPD with presented ulcer on lateral aspect of left lower leg( Above the lateral malleolus )associated with peripheral skin eroded, slough, necrotized tissue, serous discharge, foul smell and intermittent itching since 5 days . During history taking, it started from painful swelling over lateral aspect of left lower leg associated with blister formation and surrounding skin gradually eroded, but due to ignorance ulcer was formed. Patient having history of diabetic mellitus since 2 month, patient taking oral hypoglycemic drug – Glimepiride 5mg + Metformin 500mg as per advice of endocrinologist, but Patient sugar level not controlled(FBS- 158mg/dl).

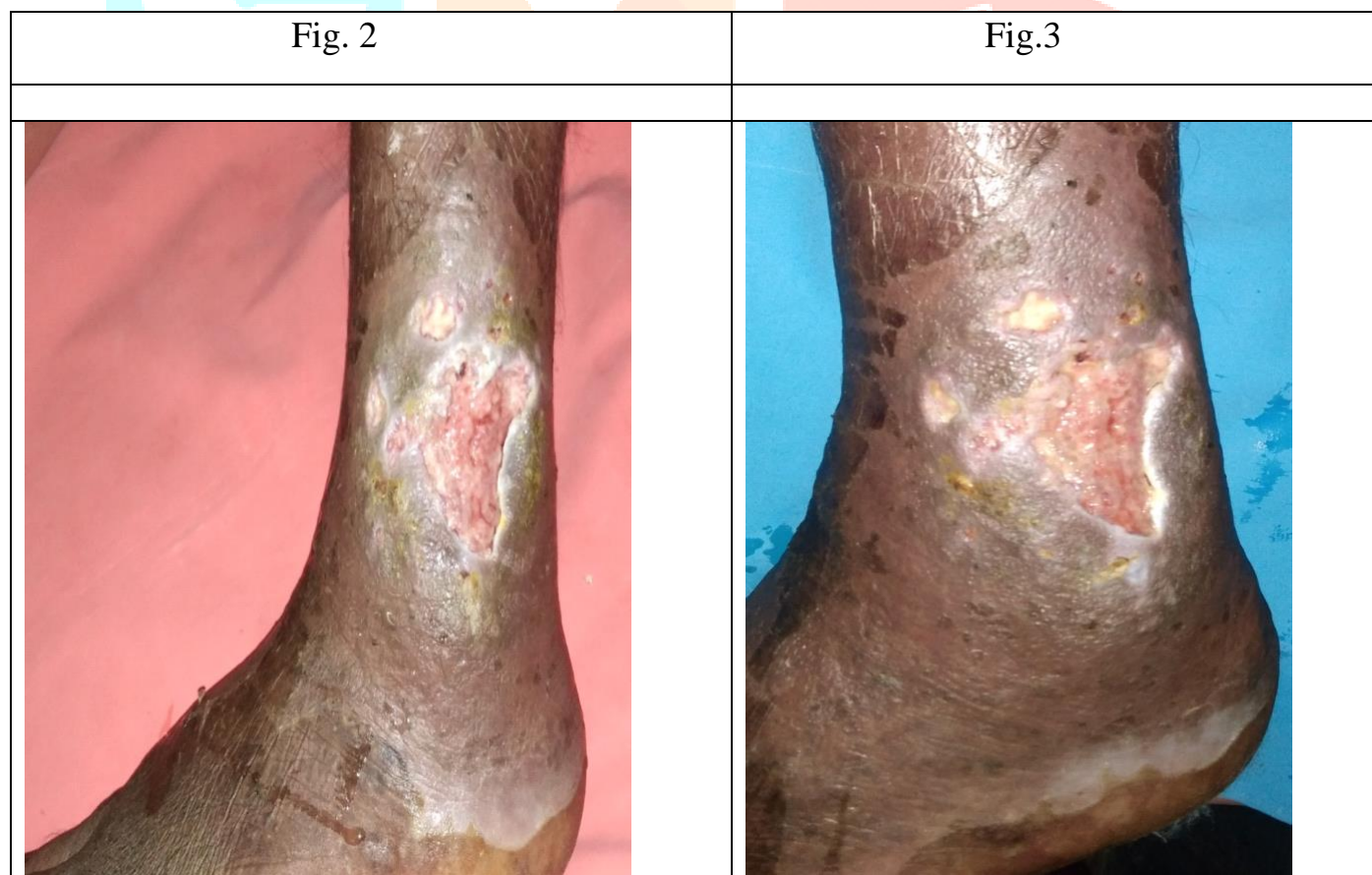
On local examination of wound, it was measured approximately 6x5 cm sized with eroded margin, slough, slopping edges , Escher present, serous discharge present and 3mm depth. On *Ayurveda* parameter, based on main symptoms, it introduced in to *Vata- Pittaja Vrana*.<sup>6</sup>

**Treatment:** local Wound area was daily cleaning with normal saline than after dressing with *Jatyadi taila* along with regular local care, orally medicine [ *Tab – Shigru gugglu 2bd* , *Tab-BGR34 2bd* ,*Madhumehari churna 1tsf bd* ,*Amalki Rasayan 1tsf bd* , *Tab- Arogyavardhani vati 2bd*,*Keshor Gugglu 2bd* ] were advised for 2week. He was also advised to take regular protein-rich diet and to keep area around wound clean. *Dashang lepa* also applied for reduced peripheral edema for 3days.

**Observation and Result:** On day 1st, wound was associated with discharge, and foul smell, sloughed base, peripheral skin discoloration and Peripheral edema. [Figure: 1]. during first week, wound debridement was done under local anesthesia because of wound was associated with slough and necrotized tissue. Then after debridement, it become clean wound and regular dressing done with *Jatyadi taila* followed by application of *dashang lepa* peripheral edema was reduced within 3days.



During 2nd week, wound was present with healthy granulation tissues with marginal contraction. (Fig. 2 and Fig 3)



After 3<sup>rd</sup> week wound Size was reduced (4cmx3cm) and healthy granulation present. On the 6<sup>th</sup> week wound Size completely reduced with mild ulceration.



**DISCUSSION:** In the present wound Peripheral edema and Surrounding skin is red, eroded margin(Blister), burning sensation(*daha*) in wound, sloughed base, slopping edges, eschar present, Serosanguineous(serous with blood) discharge present and 3mm depth. On *Ayurveda* parameter, based on main symptoms, it may resemble with *Vata- Pittaja vrana lakshan*. After diagnosing the *Dosha avastha*, *Vata-Pittaja shamana medicines* advised. Internal administration of BGR34 and *Madhumehari churna* also advised along with oral hypoglycemic drug (Glimepiride 5mg + Metformin 500mg) for management of Diabetes mellitus. Patient Sugar level (FBS-108mg/dl) was under controlled after 10 days of treatment. Peripheral wound edema was reduced after 3days of local application of *dashang lepa*.

**Effect of Vrana Vedna(Pain):** Initially there was pain and tenderness in and around the wound but after 7 days of primary wound care, the pain and tenderness started to subside gradually.

**Effect on Vrana Varna (Colour):** Changes in the wound color started to appear after 7 days of treatment and it got converted to *Shudha vrana (healthy wound)* after 7 days of treatment, the slough and the necrotic tissue and discharge started to disappear gradually and the healthy pinkish granulation tissue came in appearance.

**Effect on Strav (discharge):** There was presence of purulent discharge initially. But after application of dressing with *Jatyadi taila* at the end of 3rd week, discharge from the wound

started to reduce, this might be due to *Shodhan* properties of *Jatyadi taila*. There was mild serous discharge present throughout the treatment and complete disappearance of discharge was noticed by the end of 1 month.

**Effect on Gandha (odour):** The foul odour present in beginning reduced gradually by the end of 7days. *Shodhana* properties of the formulation might be the reason for this.

**Effect on Akriti (shape):** After 42 days of careful treatment the wound healed completely showing signs of *Rudha Vrana* (healed wound). This might be due to *Shodhana* and *Ropana* properties of *jatyadi taila* which provided healthy environment for the wound to heal

**Conclusion:** In this study Patient was admitted for around 42 days and was kept under close observation. On the basis of results it can be concluded that internal administration of *Ayurveda* formulation along with local wound care with *Jatyadi tail*. It can be concluded that formulation has both *Shodhana* (Wound Debridement) and *Ropana* (wound healing) properties indeed which provide healthy and ideal environment for a wound to heal. It could be a better option for treatment of all type of wound. It is cost effective and easily available and no any complication occurs after application of this.

## References:

1. Singh N, Armstrong DA, Lipsky BA. Preventing foot ulcers in patients with diabetes. JAMA 2005; 293:217-28
2. Pecoraro RE, Reiber GE, Burgess EM. Pathways to diabetic limb amputation. Basis for prevention. Diabetes Care 1990; 13
3. Naresh Kumar Ghodela & Tukaram Dudhamal, Wound healing potential of Ayurved herbal & herbo-mineral formulations: a brief Review, International Journal of Herbal Medicine, 2017; 5(1): 39-45
4. Ibidem *Charak Samhita* (2) *Nidan sthana*, *Prameha nidan adhyaya*, 4/46; 639
5. *Vagbhat, Ashtang Hriday, Nidan sthana, Prameha nidan adhyaya*, 10/20, edited By Dr. Ganesh Krishna Garde, 6th edition, D.V. Ambekar, Pune 1970; 192
6. *Sushruta Samhita (Chikitsa Sthana)*, edited by Shastri AD, Chaukhambha Sanskrit sansthan, Varanasi, 2007. Chi.1/7. Pp. 3