

Homoeopathic Treatment for Diabetic Foot Ulcer- A Case Report

Chittaranjan Kundu^{1*}Arti Soren²

¹Research Officer (Homoeopathy), Scientist: I, ²Research Officer (Homoeopathy), Scientist: III,
Dr. Anjali Chatterjee Regional Research Institute for Homoeopathy, Kolkata, WB, India

ABSTRACT:

A 70-year-old male patient suffered from a diabetic foot ulcer characterized by swelling, sensitivity, itching, and persistent burning sensation. Treatment consisted of homoeopathic medicines, including Belladonna 6 and 30 for acute symptoms and Arsenicum album 30 for ulcerative lesions and burning pain. External care with Calendula ointment was applied to promote wound healing. The patient exhibited progressive healing with pink granulation tissue formation and reduced swelling and redness; additional prescriptions of Belladonna 30, Arsenicum album 30, Catharis 30, and Cantharis 30 to address the remaining symptoms. They also ensured the patient continued using Calendula ointment regularly. This case demonstrates the successful management of a diabetic foot ulcer using homoeopathic remedies and highlights the importance of individualized treatment. Utilizing Wagner Grades with Monarch, Radar 10 software enhances the supporting evidence.

KEYWORDS: Diabetic foot ulcer, Homeopathic treatment, MONARCH, Radar 10, Wagner Grades.

Received: 03.08.2023 Revised: 11.09.2023 Accepted: 18.09.2023 Published: 05.10.2023

Quick Response code



*Corresponding Author:

Dr. Chittaranjan Kundu

Research Officer (Homoeopathy), Scientist: I
Dr. Anjali Chatterjee Regional Research Institute for
Homoeopathy, Kolkata, WB, India
E-mail : dr.kundu1984@gmail.com

INTRODUCTION:

Diabetes can profoundly affect foot health, including reduced blood flow, nerve damage, and impaired wound healing. If not properly managed, these factors increase the risk of foot complications, ulcers, and potentially severe infections or gangrene.

Diabetic foot ulcers (DFU) are a common reason for hospital admissions among the Indian population, posing significant financial and medical burdens on patients and their families. Many diabetic foot ulcer patients

rely on caregivers for their daily activities. Leg amputation, a frequent complication of diabetic foot ulcers, can result in permanent disability for many individuals. Unpleasant odours, excessive discharge, pain, and limited mobility often accompany diabetic ulcers. These conditions necessitate daily dressing changes, antibiotic therapy (including intravenous administration), and other medications. Such treatments can adversely affect the patient's physical health, daily functioning, socioeconomic status, financial

well-being, and psychosocial well-being, ultimately impacting their overall quality of life.^{1,2} Patients with diabetes and ulcers generally experience a poorer quality of life than those with diabetes alone³.

In India, with approximately 463 million adults worldwide living with diabetes, India ranks second, following China, with 77 million patients. The prevalence of diabetes mellitus is 8.8% among individuals aged 20-79⁴. Diabetic foot disease poses a significant challenge to healthcare systems and providers globally⁵. Individuals with diabetes face a lifetime risk of developing a foot ulcer as high as 25%, making it the leading cause of hospitalization among diabetic patients, accounting for approximately 30% of admissions⁶. In addition, the treatment of diabetic foot ulcers incurs substantial expenses, constituting approximately 20% of the total healthcare costs associated with diabetes. This financial burden surpasses the costs associated with any other complication related to diabetes. Managing diabetic foot ulcers requires significant healthcare resources and interventions, emphasizing the need for effective preventive measures and early intervention strategies to reduce the economic impact on individuals and healthcare systems alike⁶. Diabetic foot complications have emerged as a significant concern, resulting in high hospitalisation rates and disability⁷. The incidence of diabetic foot patients is rising in urban and rural India, with 85% of amputations following foot ulcers. Preventable secondary infections accompany 75% of these amputations, primarily affecting neuropathic feet. In India, neuropathic lesions contribute 80% of foot ulcers, while neuro ischemic ulcers account for the remaining 20%⁸.

Whereas Wagner Grades are a classification system used to categorize the severity of diabetic foot ulcers. These grades range from 0 to 5 and help healthcare professionals assess the extent of tissue involvement and the risk of complications in diabetic patients with foot ulcers:

- Grade 0: No open ulcer, but there might be pre-ulcerative lesions or deformities.
- Grade 1: Superficial ulcer involving the full skin thickness.
- Grade 2: Deep ulcer with involvement of ligaments and deeper structures.
- Grade 3: Deep ulcer with cellulitis or abscess formation.
- Grade 4: Gangrene limited to portions of the foot.
- Grade 5: Extensive gangrene necessitating foot amputation.

These grades aid treatment decisions and prognosis estimation for diabetic individuals with foot ulcers^{9,10}.

While conventional medical interventions play a vital role in managing diabetic foot disorders, there is growing interest in complementary and alternative therapies, such as homoeopathy. Boericke's *Materia Medica* covers remedies for ulcers like *Anthraxinum*, *Arsenicum album*, *Carbo animalis*, *Lachesis*, *Muriatic acid*, and *Tarentula-C*. The Kent repertory includes additional effective ulcer remedies like *Calcarea-Sulph*, *Kali-Sulph*, and *Merc-sol*. The case series¹¹ highlighted the prevention of amputations using homoeopathy, particularly in type II DM cases. *Kali-Bichromicum* 200 successfully treated a case of diabetic foot ulcer (DFU).¹²

A meta-analysis of 10 studies¹³ indicated that gram-negative bacteria were the leading cause of diabetic foot ulcers (DFUs). Diabetic retinopathy (DR) and albuminuria (Alb)

significantly increased the risk of DFU development¹⁴. A 12-month prospective observational study confirmed that limb ischemia, longer ulcer duration, and multiple ulcers negatively affected the prognosis of infected DFUs¹⁵. While a systematic review¹⁶ found short-term improvement in ulcers with hyperbaric oxygen therapy (HBOT), its long-term efficacy still needs to be more conclusive. Stem cell therapy¹⁷ has shown effectiveness as an alternative to amputation for patients without revascularisation options. Ceratohaoestroides extract ointment demonstrated efficacy in a single case¹⁸, and collagen implant dressings with gentamicin sulphate showed favourable outcomes in a neuro ischaemic DFU case report¹⁹. Guideline recommendations²⁰ help that healthcare professional's select appropriate footwear for individuals with diabetes. Individualized homoeopathic treatment, as observed in a retrospective cohort study²¹ and a prospective observational study²², improved glycaemic control and DFU outcomes.

CASE REPORT:

The patient is a 70-year-old male with a height of 170cm and a weight of 55kg. His blood pressure (B.P) is recorded at 122/82 mmHg. He presents with a chief complaint of an ulcerative lesion on the right foot's posterior aspect, precisely above the heel in the calcaneal region. This lesion has been present for the last month.

Symptoms associated with the ulcer include swelling, the area's paleness, and a severe burning sensation, notably alleviated when the patient washes the area with warm water. Regarding his medical history, the patient has undergone a right-sided inguinal hernia operation. His history reveals that he works

as a shopkeeper, follows a non-vegetarian diet, and smokes 2-3 cigarettes daily. On a general note, the patient is described as lean and emaciated. He is not hypertensive but has a known diagnosis of diabetes. Mentally, the patient is characterized as restless by nature and experiences disturbed sleep, primarily due to the intense burning pain in the affected foot, which tends to worsen at night.

Analysis of Symptoms:

Specific disease-related symptoms were highlighted after evaluating the symptoms and analyzing the case (Table 01). The patient was diagnosed with a psoric predominant state—a repertorial analysis using Kent's method. The Kent Repertory has been used for over a century and has stood the test of time, earning the trust of many homoeopaths. Kent's repertory is based on his extensive clinical experience and observations, making it a valuable tool for homoeopaths. Overall, the Kent Repertory is a valuable resource for homoeopaths as it aids in the precise selection of remedies based on a patient's unique symptoms, contributing to the practice of individualized and holistic healing] and Radar-10 software Table:1(**Figure -6**) was performed to gain further insight into the patient's condition [Kent J. English Kent].

Silicea:17/40, *Ars.Alb*: 17/34,
Belladonna:16/46, *Mercurius*:
16/40, *Sulphur*: 16/36

While the repertorial table may have ranked *Silicea* as the first choice with the highest score, I chose *Ars album* as the remedy for this patient. Focusing on physical symptoms primarily drove my decision, but one particular mental symptom carried significant weight in my decision-making process. The

patient's restlessness stood out prominently, and it played a decisive role in leading me to

select Ars album as the most appropriate medicine

Table-1: Reportorial analysis:

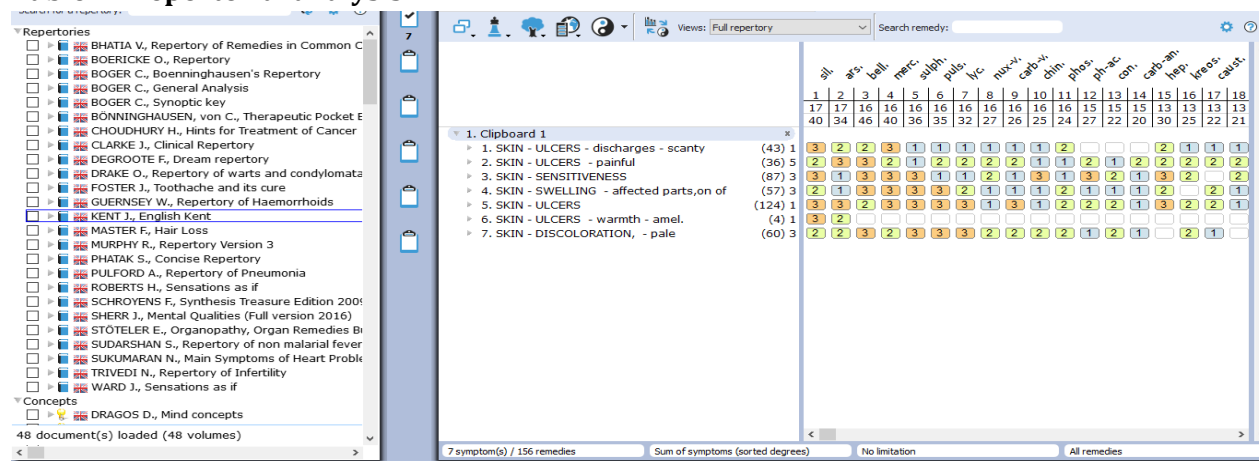


Table 2: Time line and Follow-ups:

06/10/22 First visit	<p>Fig.: 01</p> <p><i>On examination - Size: 35mm x 30 mm, Shape: liver shaped, Depth: 2.5 mm, Margin: well-defined, Floor: whitish, yellowish in colour, Discharge: sticky discharge,</i></p> <p>Wagner Grades: 1;</p>	<p>➤ <i>Belladonna</i> 6/2 doses were administered stat (morning and evening) on the day of the visit. Belladonna was chosen based on:</p> <p>swollen, Sensitive skin with a hot feeling. Throbbing conditions.</p> <p><i>Following Belladonna, the treatment plan continued as follows:</i></p> <p>➤ <i>Arsenicum album</i> 30/6 doses in sac.lac. Twice daily for three days.</p> <p>Dry, itching ulcers Burning pain that worsens at night. Relieves warm application and has a specific affinity for skin conditions.</p> <p>➤ The patient was instructed to clean and dress the lesion daily with boiled water and apply Calendula ointment twice a day for seven days. Calendula's antiseptic properties promote wound healing and reduce inflammation.</p>
13/10/22 1 st Follow-	<p>During the follow-up visit, the patient's condition showed improvement, but swelling increased.</p>	<p>The swelling and pale and redness of the foot had increased significantly.</p> <p><i>Belladonna</i> 30/10 doses, twice daily for five</p>

up	<p>The formation of pink-yellowish granulation tissue in the ulcer indicated a positive healing response. Although the burning sensation had slightly improved, it persisted to some extent. However, the swelling and redness of the foot had significantly increased.</p> <p>Fig.: 02</p> <p>Fasting Blood Sugar:108/mg/dl Postprandial Blood Sugar: 152mg/dl</p> <p>Fig:02-A</p> <p>Advice for the diabetic diet. On examination - Size: 42mm x 32 mm, Shape: liver shaped, Depth: 3.0mm, Margin: well-defined, Floor: pinkish, yellowish in colour, Discharge: sticky discharge</p> <p>Wagner Grades: 02</p>	<p>days.</p> <p><i>Arsenicum album</i> 30/½ drum, twice daily for five days.</p> <p><i>Calendula ointment</i>, external use twice daily for 20 days. Calendula has antiseptic properties and aids in wound healing and reducing inflammation.</p> <p>The rationale behind this prescription was to address the persistent burning sensation, further promote healing, and support the overall improvement in the patient's condition. Combining the selected remedies with the application of Calendula ointment aimed to provide comprehensive treatment and enhance the healing process of the ulcerative lesion.</p>
31/10/22 2 nd Follow-up	<p>The patient presented with symptoms of burning during urination, constant urge to urinate, and eruption on the skin characterized by mealy scales. Additionally, there was a mild burning sensation.</p> <p>Fig.: 03</p> <p>Wagner Grades: 01</p>	<p><i>Cantharis</i> 30/ ½ drum, three globules twice daily for seven days.</p> <p><i>Calendula ointment</i>, external use only before bedtime at night.</p>
10/11/22 3 rd Follow-up	<p>3rd Follow-up</p> <p>The patient exhibited progressive healing of the ulcerative lesion during the subsequent visits. However, the patient reported experiencing throbbing pain in the affected area. To address this symptom.</p> <p>Fig.: 04</p> <p>Wagner Grades: 00</p>	<p><i>Belladonna</i>30/ ½ drum, Four Globules Twice a day for five days.</p>
01/12/22 4 th Follow-	<p>During the subsequent visits, the patient continued showing progressive lesion healing.</p>	<p><i>Placebo</i> 30/ 1 drum, three globules, Once daily for 30 days,</p>

up	Wagner Grades: 00 No ulcer found Fig.: 05	
----	---	--

Table:03 Assessment according to MONARCH: MODIFIED NARANJO CRITERIA

Modified Naranjo criteria	Yes	No	Not sure or N/A
Was there an improvement in the primary symptom or condition for which the homoeopathic medicine was prescribed?	+2		
Did the clinical improvement occur within a plausible timeframe relative to the drug intake?	+1		
Was there an initial aggravation of symptoms?	+1		
Did the effect encompass more than the main symptom or condition (i.e. were other symptoms ultimately improved or changed)?	+1		
Did overall wellbeing improve?	+1		
(A) Direction of cure: did some symptoms improve in the opposite order of the development of symptoms of the disease?			Not sure
(B) Direction of cure: did at least two of the following aspects apply to the order of improvement of symptoms: From organs of more importance to those of less importance from deeper to more superficial aspects of the individual from the top downwards			Not sure
Did "old symptoms" (defined as non-seasonal and non-cyclical symptoms that were previously thought to have resolved) reappear temporarily during the course of improvement?			Not sure
Are there alternate causes (other than the medicine) that – with a high probability- could have caused the improvement? (Consider known course of disease, other forms of treatment, and other clinically relevant interventions)		+1	
Was the health improvement confirmed by any objective evidence? (e.g. lab test, clinical observation, etc.)	+2		
Did repeat dosing, if conducted, create similar clinical improvement?			Not sure
Total score Maximum score = 13 Minimum score = -3	+8	+1	

Table 04 Assessment according to Quality of Life
EQ-5D-5L (UK English sample version)

Under each heading, please tick the **ONE** box that best describes your health **TODAY**

MOBILITY

- I have no problems in walking about
- I have slight problems in walking about
- I have moderate problems in walking about
- I have severe problems in walking about
- I am unable to walk about

<input checked="" type="checkbox"/>

SELF-CARE

- I have no problems washing or dressing myself
- I have slight problems washing or dressing myself
- I have moderate problems washing or dressing myself
- I have severe problems washing or dressing myself
- I am unable to wash or dress myself

<input checked="" type="checkbox"/>

USUAL ACTIVITIES(e.g. work, study, housework, family or leisure activities)

- I have no problems doing my usual activities
- I have slight problems doing my usual activities
- I have moderate problems doing my usual activities
- I have severe problems doing my usual activities
- I am unable to do my usual activities

<input checked="" type="checkbox"/>

PAIN / DISCOMFORT

- I have no pain or discomfort
- I have slight pain or discomfort
- I have moderate pain or discomfort
- I have severe pain or discomfort
- I have extreme pain or discomfort

<input checked="" type="checkbox"/>

ANXIETY / DEPRESSION

- I am not anxious or depressed
- I am slightly anxious or depressed
- I am moderately anxious or depressed
- I am severely anxious or depressed
- I am extremely anxious or depressed

<input checked="" type="checkbox"/>

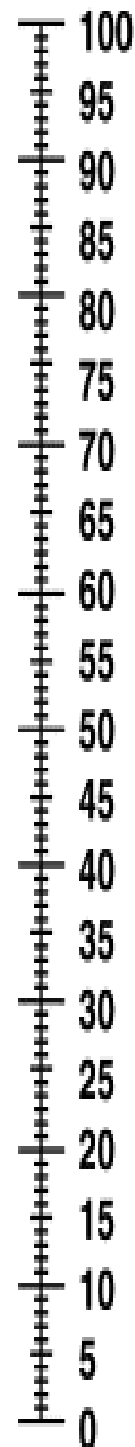
We would like to know how good or bad your health is TODAY.

- This scale is numbered from 0 to 100.
- 100 means the best health you can imagine. 0 means the worst health you can imagine.
- Mark an X on the scale to indicate how your health is TODAY.
- Now, please write the number you marked on the scale in the box below

YOUR SCORE TODAY

70

The best health
you can imagine



The worst health
you can imagine

Table 05 Assessment according to Quality of Life
EQ-5D-5L (UK English sample version)

Under each heading, please tick the **ONE** box that best describes your health **TODAY**.

MOBILITY

- I have no problems in walking about
- I have slight problems in walking about
- I have moderate problems in walking about
- I have severe problems in walking about
- I am unable to walk about

<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

SELF-CARE

- I have no problems washing or dressing myself
- I have slight problems washing or dressing myself
- I have moderate problems washing or dressing myself
- I have severe problems washing or dressing myself
- I am unable to wash or dress myself

<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

USUAL ACTIVITIES (e.g. work, study, housework, family or leisure activities)

- I have no problems doing my usual activities
- I have slight problems doing my usual activities
- I have moderate problems doing my usual activities
- I have severe problems doing my usual activities
- I am unable to do my usual activities

<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

PAIN / DISCOMFORT

- I have no pain or discomfort
- I have slight pain or discomfort
- I have moderate pain or discomfort
- I have severe pain or discomfort
- I have extreme pain or discomfort

<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

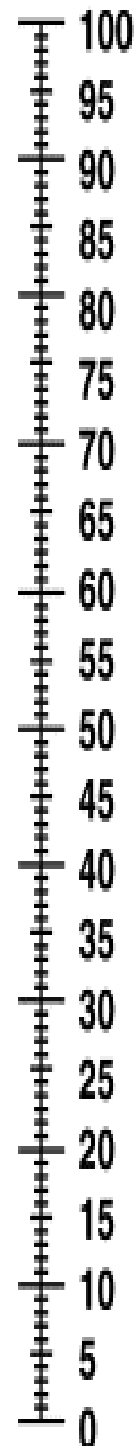
ANXIETY / DEPRESSION

- I am not anxious or depressed
- I am slightly anxious or depressed
- I am moderately anxious or depressed
- I am severely anxious or depressed
- I am extremely anxious or depressed

<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

- We would like to know how good or bad your health is TODAY.
- This scale is numbered from 0 to 100.
- 100 means the best health you can imagine. 0 means the worst health you can imagine.
- Mark an X on the scale to indicate how your health is TODAY.
- Now, please write the number you marked on the scale in the box below

YOUR SCORE TODAY**90**

**The best health
you can imagine**

**The worst health
you can imagine**



Fig-1: First consultation DFU (6/10/22)


Fig-2: 13/10/22 1st Follow-up

डा० अंजलि चटर्जी, क्षेत्रीय होम्योपैथी अनुसंधान संस्थान
Dr. Anjali Chatterji Regional Research Institute for Homoeopathy
At-Bhola Nath Chakravarti Bhawan
50-Rajendra Chatterjee Road, Kolkata - 700 035
Central Council for Research in Homoeopathy, New Delhi
DEPT. OF AYUSH, MINISTRY OF HEALTH & FAMILY WELFARE, GOVT. OF INDIA

Reg. No. _____ Date 10/10/22
Name _____ Sex _____
Age _____

REPORT ON THE EXAMINATION OF BLOOD

HAEMATOLOGY (Routine)

Hb% 12.4 Gm/dl TLC : 5,600 CUMM.
DLC : N-55 % L-36 % E-08 % M-01 % B-00 %
ESR : 14 mm 1st hour (Westergren's)
Parasite : (M/F) Neg - 40.91 MEV - 99.24, MEV - 30.04
Blood Group : Rh - 30.3912, P.T - 162.5712

BIOCHEMISTRY -

Blood Sugar (FPR) 102/152 mg/dl
HbA1c _____ %
Blood Urea _____ mg/dl
Serum Creatinine _____ mg/dl
Serum Uric Acid _____ mg/dl
Serum Bilirubin (TD) _____ mg/dl
Serum Cholesterol _____ mg/dl
Serum Triglycerides _____ mg/dl
Others _____

SEROLOGY -

CRP _____
RA Factor _____
ASO _____
HBsAg _____
Widal Test _____

HORMONAL ASSAY

TSH _____ uIU/ml
T3 _____ ng/ml
T4 _____ ug/dl
Others _____

Signature _____

Fig-3-A Pathology report


Fig-4: 31/10/22 2nd Follow-up



Fig-5 10/11/22 3rd Follow-up



Fig-6:01/12/22 4th Follow-up

DISCUSSION:

In this case, the assessment utilized the Wagner system and the blood biochemistry report, along with MONARCH, with consistent photographs taken from the same angle and with consistent light exposure. However, it should be noted that photographic evidence has limitations in terms of diagnostic accuracy, which is one of the drawbacks of the case report. The study also incorporated the quality-of-life scale (EQ-5D-EL) as an additional outcome measurement tool to supplement the findings.

In this case, the total MONARCH score (Table: 03) was 09 after 55 days of treatment. A score of 09 indicates a 'definite' association between homoeopathic medicine and the observed outcome. To provide some context, here are the score ranges and their corresponding interpretations²³:

- Definite: Total score ≥ 9
- Probable: Total score 5-8
- Possible: Total score 1-4
- Doubtful: Total score ≤ 0

Since the total score was 09, it suggests a strong and definite association between

homoeopathic medicine and the observed outcome in this case.

Significantly, the quality-of-life scale (Tables 04 and 05) provided valuable insights into the patient's improvement after one month. Notably, the patient visited the outpatient department without knowing their diabetic status and received no antidiabetic medication. At our hospital, postprandial plasma glucose levels were obtained and assessed, providing crucial information for evaluation. Although subsequent blood glucose measurements were not performed, the ulcer gradually healed. It progressed from Grade 1 to Grade 2 and ultimately reached Grade 0 according to the Wagner system, indicating complete healing.

Regarding the treatment approach, the use of *Belladonna* was emphasised due to its beneficial effects on the skin condition of cellulitis, mainly characterised by swelling. *Belladonna* is known to have a notable impact on the vascular system of the skin, leading to symptoms such as throbbing and burning pain—the initial prescription aimed to address the throbbing pain, a characteristic symptom associated with *Belladonna*.

On the other hand, Arsenicum Album played a significant role in this particular case. It is known for its profound effects on various organs. In the context of the patient's condition, Arsenicum Album was prescribed to alleviate restlessness caused by the burning pain in the ulcer, particularly pronounced at night. The patient experienced relief through the application of hot treatments.

Apart from this case report, we also found two cases of diabetic foot ulcers successfully treated using homoeopathic medicines, *Lachesis mutus* and *Calendula officinalis Q*, in conjunction with standard care at an inpatient department²⁴. Homeopathy significantly treats chronic leg ulcers, particularly those associated with diabetes and varicose veins.²⁵ A detailed review of case reports showed that *Silicea*, *Sulphur*, *Lachesis*, *Sepia*, and *Medorrhinum* were the primary drugs used in the treatment of diabetic foot ulcers (DFU)^{11,26,27}

Combining the Wagner system assessment, blood biochemistry report, photographic evidence, and the quality-of-life scale provided comprehensive insights into the patient's progress and treatment outcomes. While acknowledging the limitations of photographic evidence and the need for further measurements, the study demonstrated a positive trend toward healing and improvement in the patient's condition. The tailored prescriptions of the Belladonna and Arsenicum Album addressed specific symptoms and contributed to the overall management of the case.

CONCLUSION:

This case highlights homoeopathic medicines' effectiveness in managing diabetic foot ulcers. Considering the patient's specific symptoms

and characteristics, combining internal remedies and external wound care demonstrated a comprehensive approach to promote healing, reduce inflammation, and alleviate symptoms.

Limitation of the study:

To scientifically validate this intervention, further trials involving more cases are necessary for this single case study.

Patients consent:

Before and after treatment, the patient consented to publish images while ensuring their identity remains undisclosed.

REFERENCES:

1. Sekhar MS, Thomas RR, Unnikrishnan MK, Vijaya Narayana K, Rodrigues GS. Impact of diabetic foot ulcer on health-related quality of life: A cross-sectional study. In Seminars in vascular surgery 2015 Sep 1 (Vol. 28, No. 3-4, pp. 165-171). WB Saunders
2. Reiber G, Lipsky B, Gibbons G. The burden of diabetic foot ulcers. The American journal of surgery. 1998 Aug 1;176(2):5S-10S
3. Goodridge D, Trepman E, Embil JM. Health-related quality of life in diabetic patients with foot ulcers: literature review. Journal of Wound Ostomy & Continence Nursing. 2005 Nov 1;32(6):368-77
4. A review of the pathophysiology, classification, and treatment of foot ulcers in diabetic patients. Clinical diabetes. 2009 Apr 1;27(2):52-8
5. Foot D. A Clinical Atlas Pendsey S. New Delhi, India: Jaypee Brothers Medical Publishers. 2003.

6. Prevalence of diabetic foot ulcers in newly diagnosed diabetes mellitus patients. Sinharay K, Paul UK, Bhattacharyya AK, Pal SK. <https://pubmed.ncbi.nlm.nih.gov/23741832/> *Indian Med Assoc.* 2012;110:608–611. Sinharay K, Paul UK, Bhattacharyya AK, Pal SK. Prevalence of diabetic foot ulcers in newly diagnosed diabetes mellitus patients. *Journal of the Indian Medical Association.* 2012 Sep 1;110(9):608-11
7. Government of India, Ministry of Health & Family Welfare: standard treatment guidelines - the diabetic foot - prevention and management in India - full background document (draft) [Jun;2020];<http://clinicaestablishments.gov.in/WriteReadData/5381.pdf> *January.* 2016 & Family Welfare Government of India.
8. Tripathy JP, Thakur JS, Jeet G, Chawla S, Jain S, Pal A, Prasad R, Saran R. Prevalence and risk factors of diabetes in a large community-based study in North India: results from a STEPS survey in Punjab, India. *Diabetology & metabolic syndrome.* 2017 Dec;9(1):1-8
9. Akther JM, Khan IA, Shahpurkar VV, Khanam N, Syed ZQ. Evaluation of the diabetic foot according to Wagner's classification in a rural teaching hospital. *The British Journal of Diabetes & Vascular Disease.* 2011 Mar;11(2):74-9.
10. Shah P, Inturi R, Anne D, Jadhav D, Viswambharan V, Khadilkar R, Dnyanmote A, Shahi S, Shah PP, Inturi Jr R, Dnyanmote AS. Wagner's classification as a tool for treating diabetic foot ulcers: Our observations at a suburban teaching hospital. *Cureus.* 2022 Jan 22;14(1).
11. Mahesh S, Mallappa M, Vithoulkas G. Gangrene: five case studies of gangrene, preventing amputation through homoeopathic therapy.
12. Pal PP, Sadhukhan S, Saha S. Management of Diabetic Foot Ulcer by Homoeopathy-A Case Report. *International Journal of AYUSH Case Reports.* 2021 Dec 25;5(4):290-7.
13. Zubair M. Prevalence and interrelationships of foot ulcer, risk-factors and antibiotic resistance in foot ulcers in diabetic populations: A systematic review and meta-analysis. *World journal of diabetes.* 2020 Mar 3;11(3): 78.
14. Tomita M, Kabeya Y, Okisugi M, Katsuki T, Oikawa Y, Atsumi Y, Matsuoka K, Shimada A. Diabetic microangiopathy is an independent predictor of incident diabetic foot ulcer. *Journal of diabetes research.* 2016 Feb 29;2016
15. Ndosi M, Wright-Hughes A, Brown S, Backhouse M, Lipsky BA, Bhogal M, Reynolds C, Vowden P, Jude EB, Nixon J, Nelson EA. Prognosis of the infected diabetic foot ulcer: a 12-month prospective observational study. *Diabetic Medicine.* 2018 Jan;35(1):78-88
16. Kranke P, Bennett MH, Martyn-St James M, Schnabel A, Debus SE, Weibel S. Hyperbaric oxygen therapy for chronic wounds. *Cochrane Database of Systematic Reviews.* 2015(6).
17. Health Quality Ontario. Hyperbaric oxygen therapy for the treatment of diabetic foot ulcers: a health technology assessment. *Ontario health technology assessment series.* 2017;17(5):1.
18. Lopes L, Setia O, Aurshina A, Liu S, Hu H, Isaji T, Liu H, Wang T, Ono S, Guo X, Yatsula B. Stem cell therapy for diabetic

- foot ulcers: a review of preclinical and clinical research. Stem cell research & therapy. 2018 Dec;9(1):1-6.
19. Almeida CC. Collagen implant with gentamicin sulphate as an option to treat a neuroischaemic diabetic foot ulcer: Case report. International journal of surgery case reports. 2016 Jan 1; 21:48-51.
20. Van Netten JJ, Lazzarini PA, Armstrong DG, et al. Diabetic Foot Australia guideline on footwear for people with diabetes. J Foot Ankle Res. 2018; 11:1-4.
21. To KL, Fok YY, Chong KC, Lee YC, Yiu LS. Individualized homeopathic treatment in addition to conventional treatment in type II diabetic patients in Hong Kong—a retrospective cohort study. Homeopathy. 2017 May;106(02):79-86.
22. Nayak C, Singh V, Singh K, Singh H, Gupta J, Ali M, Ponnamm H. A prospective observational study to ascertain the role of homeopathic therapy in the management of diabetic foot ulcer. Indian Journal of Research in Homoeopathy. 2012;6(1):22-31.
23. Van Haselen RA. Development of a supplement (HOM-CASE) to the CARE clinical case reporting guideline. Complement Ther Med. 2016; 25:78-85
24. Muraleedharan KC, Prakash P. Lachesis mutus and Calendula officinalis Q in Diabetic Foot Ulcer Treatment—Two Case Reports. Homoeopathic Links. 2021 Jun;34(02):164-74.
25. Greeshma IK, Dastagiri P. A review of the effectiveness of homoeopathy in the management of chronic leg ulcers. Int J Hom Sci 2021;5(1):16-20. DOI: 10.33545/26164485.2021.v5.i1a.285
26. Ponnamm HB, Gupta J. Role of silicea in diabetic foot ulcer: A retrospectively analysed case series. Homoeopathic Links. 2020 Mar;33(01):053-8
27. Ali MS, Bindu HP. A case of diabetic foot ulcer: Homoeopathic treatment could avoid amputation. Homoeopath Herit. 2009; 34:35-8.

Conflict of interest: The author declares no conflict of interest.

Guarantor: The corresponding author is a guarantor of this article and its contents.

Source of Support: None

How to cite this article:

Kundu C, Soren A. Homoeopathic Treatment for Diabetic Foot Ulcer: A Case Report Int. J. AYUSH Care. 2023;7(3):305-319.