



## Letter to the Editor

# Key points in the success of diabetic foot ulcer treatment

 İsmail Sezikli

*Hitit University Faculty of Medicine, Department of General Surgery, Çorum, Turkey*

Dear Editor,

Diabetic foot ulcers (DFUs) represent a significant challenge in diabetic patient care due to their chronic nature and potential for severe complications, including infection and amputation. Recent advances in understanding the pathophysiology and management of DFUs have highlighted several critical areas that can enhance treatment success.

Timely identification of patients at risk for DFUs is paramount. Tools such as the Diabetic Foot Risk Classification System enable clinicians to stratify patients based on ulcer risk, facilitating early interventions (1). Regular foot examinations and patient education on self-monitoring can significantly reduce ulcer incidence (2).

A comprehensive, multidisciplinary approach is essential for effective DFU management. Involving endocrinologists, podiatrists, vascular surgeons, and wound care specialists ensures that all aspects of patient care are addressed, from glycemic control to wound management (3). Multidisciplinary clinics have shown to improve outcomes and reduce amputation rates (4).

The introduction of advanced wound care technologies has revolutionized DFU treatment. Negative pressure wound therapy (NPWT), bioengineered skin substitutes, and growth factor therapies have demonstrated efficacy in promoting wound healing (5). NPWT, in particular, has been associated with faster healing times and reduced infection rates (5).

Infection is a common and serious complication of DFUs. Effective management requires accurate diagnosis and targeted antibiotic therapy. The use of modern molecular diagnostic tools has improved the identification of pathogens, allowing for more precise treatment (6). Additionally, antibiotic stewardship programs are crucial to preventing resistance and ensuring the effectiveness of available treatments (7).

In conclusion, the management of diabetic foot ulcers requires a holistic and patient-centered approach, integrating early detection, multidisciplinary care, advanced therapies, and patient education. Continued

**Address for correspondence:** İsmail Sezikli, Hitit University Faculty of Medicine, 19100, Çorum, Turkey. **Phone:** +90 364 219 30 00

**E-mail:** ismailsezikli@yahoo.com **ORCID:** 0000-0002-6801-1465

**Received:** 1 July 2024 **Revised:** 6 August 2024 **Accepted:** 12 August **Published:** 21 August 2024

**OPEN ACCESS** This is an open access article under the CC BY-NC license (<http://creativecommons.org/licenses/by-nc/4.0/>).



research and innovation in treatment strategies are essential to further improve outcomes for patients with DFUs. By focusing on these key areas, healthcare providers can enhance the success of DFU treatment and improve the quality of life for diabetic patients.

**Keywords:** Amputation, diabetic foot ulcers, foot care, glycemic control, wound.

**Conflicts of interest:** The authors declare no conflicts of interest.

**Financial support and sponsorship:** None.

**Peer-review:** Externally peer-reviewed.

**Authorship contributions:** Concept, design, supervision, funding, materials, data collection and/or processing, analysis and/or interpretation, literature search, writing, and critical review: IS.

## References

1. Armstrong DG, Boulton AJM, Bus SA. Diabetic Foot Ulcers and Their Recurrence. *N Engl J Med*. 2017;376:2367-75
2. Armstrong DG, Lavery LA. Diabetic foot ulcers: prevention, diagnosis and classification. *Am Fam Physician*. 1998;57:1325-32.
3. Bus SA, Lavery LA, Monteiro-Soares M, Rasmussen A, Raspovic A, Sacco ICN, et al. Guidelines on the prevention of foot ulcers in persons with diabetes (IWGDF 2019 update). *Diabetes Metab Res Rev*. 2020;36:e3269.
4. Schaper NC, van Netten JJ, Apelqvist J, Bus SA, Hinchliffe RJ, Lipsky BA. Practical Guidelines on the prevention and management of diabetic foot disease (IWGDF 2019 update). *Diabetes Metab Res Rev*. 2020;36:e3266.
5. Rayman G, Vas P, Dhatariya K, Driver V, Hartemann A, Londahl M, et al. Guidelines on use of interventions to enhance healing of chronic foot ulcers in diabetes (IWGDF 2019 update). *Diabetes Metab Res Rev*. 2020;36:e3283.
6. Hinchliffe RJ, Forsythe RO, Apelqvist J, Boyko EJ, Fitridge R, Hong JP, et al. Guidelines on diagnosis, prognosis, and management of peripheral artery disease in patients with foot ulcers and diabetes (IWGDF 2019 update). *Diabetes Metab Res Rev*. 2020;36:e3276.
7. van Netten JJ, Bus SA, Apelqvist J, Lipsky BA, Hinchliffe RJ, Game F, et al. Definitions and criteria for diabetic foot disease. *Diabetes Metab Res Rev*. 2020;36:e3268.