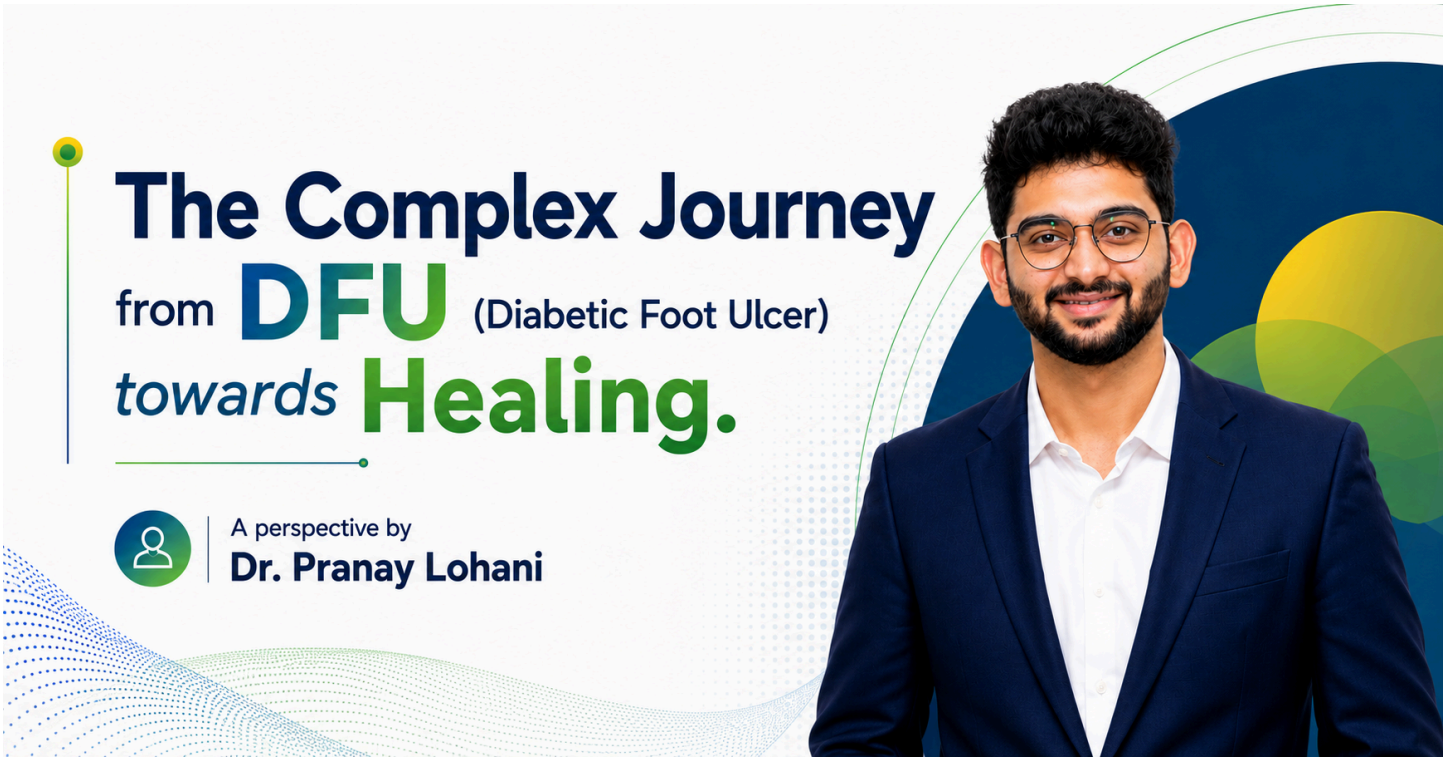

The Complex Journey from DFU (Diabetic Foot Ulcer) towards Healing

-Dr. Pranay Lohani

Which dressing should I use? It is one of the most common questions in wound care. But when a diabetic foot ulcer isn't healing, perhaps the more important question is:

Why isn't this wound healing?

A dressing can support the wound environment—but it cannot, by itself, correct every factor responsible for delayed healing. A diabetic foot ulcer is rarely just a wound. It is often the result of an interaction between **neuropathy, pressure, infection, impaired perfusion and systemic factors.** So before changing the dressing, perhaps we should step back and assess the bigger picture.

1. Is the wound bed prepared?

A wound cannot progress effectively through healing if devitalized tissue, slough or necrotic tissue remains unaddressed. Wound-bed preparation involves appropriate assessment of:

• *Tissue viability*

• *Infection/inflammation*

• *Moisture balance*

• *Wound edges*

Before deciding what to put on a wound, we need to understand what is preventing it from healing.

2. Is debridement being adequately addressed?

Appropriate removal of non-viable tissue can help reduce barriers to healing, facilitate wound assessment and create a more suitable wound bed for subsequent management.

The method of debridement should be selected according to the wound, patient factors and clinical circumstances, enzymatic debridement often being the best method.

3. Is it actually infected?

A chronic diabetic foot ulcer may be colonized with microorganisms without being clinically infected. **Colonization is not the same as infection.** Clinical assessment remains critical in determining whether infection is present and whether antimicrobial therapy is appropriate.

This distinction matters because treating every chronic ulcer as an infection may divert attention from other factors responsible for delayed healing.

4. Is the wound being repeatedly subjected to pressure?

This is particularly important in plantar diabetic foot ulcers. Neuropathy can reduce protective sensation, allowing patients to continue walking on an injured area without recognizing the extent of repetitive trauma.

Think about it: ***If we repeatedly apply pressure to a wound, can we reasonably expect a dressing alone to heal it?***

Offloading is therefore not an optional add-on—it is a fundamental part of managing appropriate diabetic foot ulcers.

5. Does the wound have adequate perfusion?

Healing requires adequate oxygen and nutrient delivery. When a wound fails to progress despite appropriate local care, clinicians should consider whether **peripheral arterial disease or impaired perfusion** could be contributing, particularly when clinical findings raise suspicion.

Sometimes the barrier to healing isn't on the surface of the wound—it is **what lies beneath it.**

6. And finally—what about the patient?

The wound doesn't exist in isolation. **Glycemic control, nutrition, neuropathy, comorbidities, footwear, mobility and adherence** can all influence healing. This is why diabetic foot care often requires a **multidisciplinary approach**, rather than relying on a single intervention.

Think Beyond the Dressing

WOUND *— Is the wound bed prepared?*

DEBRIDEMENT *— Has non-viable tissue been appropriately addressed?*

INFECTION *— Is there clinical infection?*

PRESSURE *— Is the wound adequately offloaded?*

PERFUSION *— Is blood supply adequate?*

PATIENT *— Are systemic and behavioral factors being addressed?*

The dressing has a role. **But it is only one component of a comprehensive wound-care strategy.** Perhaps the next time we encounter a non-healing diabetic foot ulcer, instead of asking ***Which dressing should I use?*** we should first ask: ***What is preventing this wound from healing?***

A question for clinicians

In your everyday practice, when a diabetic foot ulcer shows **little or no progress despite wound care**, what is the **first factor you reassess**?

-Wound-bed preparation/Debridement

-Infection

-Offloading

-Perfusion

-Glycemic/Systemic Factors

We look forward to your valuable feedback, Kindly share your experience and views.

What do you see most commonly being looked over in clinical practice?

References:

· *Chen P, et al. Diabetes Metab Res Rev. 2024;40(3):e3644.*

· *Lazzarini PA, et al. Diabetes Metab Res Rev. 2024;40(3):e3650.*

· *Senneville É, et al. Clin Infect Dis. 2023;ciad527.*

· *Fitridge R, et al. J Vasc Surg. 2023;78(5):1101–1131.*

· *Armstrong DG, Boulton AJM, Bus SA. N Engl J Med. 2017;376:2367–2375.*

IWGDF 2023 Wound Healing Guideline