

Individualize Treatment for Diabetes-Related Foot Infections

Conversations about how to treat foot infections in patients with diabetes will be spurred by updated treatment guidelines.

Create an individualized care plan that includes debridement...wound care...off-loading...and specialist referrals (vascular, etc), if needed.

Keep in mind, about half of diabetes-related foot ulcers are not infected...and there are no good data that antibiotics speed ulcer healing or reduce risk of an infection.

But recommend empiric antibiotics if there are signs or symptoms of an infection...redness, warmth, drainage, etc. Help choose a regimen based on likely pathogens, patient-specific factors (allergies, severity, etc), and your local antibiogram if available.

Mild. For infections with superficial inflammation, advise covering gram-positives with oral cephalexin or dicloxacillin.

But for patients who've taken antibiotics within the past month, also cover gram-negatives with agents such as amoxicillin/clavulanate.

Add MRSA coverage (doxycycline, TMP/SMX, etc) in patients at risk...such as those with a history of MRSA infection or known colonization.

Don't empirically cover for *Pseudomonas* unless there are additional risk factors, such as recent positive cultures from the affected site or frequent foot exposure to water (hot tub, lake, pool, etc).

Moderate. For wounds that are deeper or with erythema 2 cm or more from the wound margin...withOUT systemic signs (fever, tachycardia, etc)...ensure gram-positive and gram-negative coverage.

Recommend amoxicillin/clavulanate in most cases, especially if you suspect anaerobes...such as a wound with a foul odor or necrosis.

Consider IV antibiotics for high-risk patients, such as those with peripheral artery disease or those unable to adhere to oral meds.

And if needed, add empiric coverage for MRSA.

Severe. For any patient with at least 2 systemic signs...or not responding to oral therapy...jump to IV antibiotics.

Advise covering gram-positives, gram-negatives, and anaerobes (ampicillin/sulbactam, ceftriaxone plus metronidazole, etc).

But if Pseudomonas is suspected, suggest a regimen such as IV piperacillin/tazobactam.

And add IV vancomycin for patients at risk for MRSA.

Expect treatment duration to vary based on severity...starting with 1 to 2 weeks for mild infections.

For more on therapy duration and when to switch to po, see our resource, Skin and Soft Tissue Infections.

And get our resource, *Managing Beta-Lactam Allergies*, for help sifting through options for patients reporting a penicillin allergy.

Key References:

Cite this document as follows: Article, Individualize Treatment for Diabetes-Related Foot Infections, Hospital Pharmacy Technician's Letter, March 2024

The content of this article is provided for educational and informational purposes only, and is not a substitute for the advice, opinion or diagnosis of a trained medical professional. If your organization is interested in an enterprise subscription, email sales@trchealthcare.com.

© 2024 Therapeutic Research Center (TRC). TRC and Hospital Pharmacy Technician's Letter and the associated logo(s) are trademarks of Therapeutic Research Center. All Rights Reserved.



- -Senneville É, Albalawi Z, van Asten SA, et al. IWGDF/IDSA Guidelines on the Diagnosis and Treatment of Diabetes-related Foot Infections (IWGDF/IDSA 2023). Clin Infect Dis. 2023 Oct 2:ciad527. doi: 10.1093/cid/ciad527.
- -Peters EJG, Albalawi Z, van Asten SA, et al. Interventions in the management of diabetes-related foot infections: A systematic review. Diabetes Metab Res Rev. 2023 Oct 10:e3730. doi: 10.1002/dmrr.3730.
- -Polk C, Sampson MM, Roshdy D, Davidson LE. Skin and Soft Tissue Infections in Patients with Diabetes Mellitus. Infect Dis Clin North Am. 2021 Mar;35(1):183-197.

Pharmacist's Letter. September 2024, No. 400304

Cite this document as follows: Article, Individualize Treatment for Diabetes-Related Foot Infections, Hospital Pharmacy Technician's Letter, March 2024

The content of this article is provided for educational and informational purposes only, and is not a substitute for the advice, opinion or diagnosis of a trained medical professional. If your organization is interested in an enterprise subscription, email sales@trchealthcare.com.

© 2024 Therapeutic Research Center (TRC). TRC and Hospital Pharmacy Technician's Letter and the associated logo(s) are trademarks of Therapeutic Research Center. All Rights Reserved.