Diabetic Foot Infection

Determine the Acuity

NON-INFECTED:
No signs of infection;
no swelling, erythema, pain, warmth, or purulence;
[NO signs of cellulitis; non-infected ulcer may have some surrounding erythema]

ACUTE MILD:
Local infection with 2 of: swelling, erythema, pain, warmth, or purulence;
Cellulitis >0.5 cm to ≤2 cm around ulcer;
[NO deep tissue or systemic toxicity]

ACUTE MODERATE:
Local infection with with cellulitis >2 cm or deep tissue involvement (e.g., abscess, osteomyelitis, septic arthritis, fasciitis);
[NO systemic toxicity]

ACUTE SEVERE:
Local infection as described in “acute moderate” with systemic illness (e.g. fever, tachycardia, tachypnea, leukocytosis)

Diabetic Ulcer

New or chronic diabetic ulcers with no signs of infection should not be treated with antibiotics, however appropriate management is critical for preserving limb function. The following measures will help in wound healing and avoid adverse outcomes, such as amputation.

Reduce Pressure

Diabetic ulcers form as a result of pressure points that are not felt by the patient.

- Promote footwear that is comfortable, supportive, and protective.
- Ensure the patient or their care team inspects the feet regularly to recognize any new pressure-associated areas.

Improve Circulation

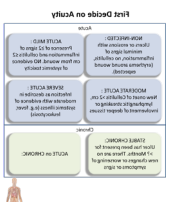
- Evaluate extremities for reduced circulation for all patients with diabetic ulcers.
- Consult vascular surgery for assessment.

Optimize Glycemic control

- Involve GP or endocrinologist to target HgA1c of 8% or less

Promote Wound Healing

- Consult wound-care team to optimize dressings and community wound care.



Diabetic Foot Infection
Acute Mild

Acute diabetic foot infections should be treated quickly, but chronic infections require discussion of management goals and culture prior to treatment. Underlying causes, such as poor glycemic control and vascular compromise, should be discussed. Usual pathogens are streptococci and *S. aureus*. Oral therapy is preferred and narrowing by 48 hours based on culture results (e.g. stop MRSA coverage if cultures are negative).

Oral therapy

Drug	Dose	Route	Duration
Cephalexin	500 mg to 1000 mg QID	PO	7 days

If IV therapy required (change to PO when possible)

Cefazolin	2 g q8h	IV	7 days

→ If purulent **AND** MRSA suspected, **ADD** ONE of:

TMP-SMX	2 DS tabs BID	PO	7 days
Doxycycline	100 mg BID	PO	7 days

Second-line (if cephalexin allergy)

Clindamycin	600 mg TID	PO	7 days
Amoxicillin-clavulanate	875/125 mg BID	PO	7 days

Remember to check cultures, revise your diagnosis and consider oral Rx by day 3

Diabetic Foot Infection
Acute Moderate

Acute diabetic foot infections should be treated quickly, but chronic infections require discussion of management goals and culture prior to treatment. Underlying causes, such as poor glycemic control and vascular compromise, should be discussed. Usual pathogens are polymicrobial. Severity should determine PO vs. IV therapy with narrowing based on culture results, investigations, and clinical improvement.

Oral Therapy (no evidence of osteomyelitis)

Drug	Dose	Route	Duration
Amoxicillin-clavulanate	875 mg BID	PO	7-14 days

If IV therapy required or osteomyelitis suspected, use BOTH:

Ceftriaxone + Metronidazole	2 g IV q24h 500 mg q12h	IV PO/IV	ID consult recommended

→ If purulent **AND** MRSA suspected, **ADD** ONE of:

TMP-SMX	2 DS tabs BID	PO	7-14 days
Doxycycline	100 mg BID	PO	7-14 days

Second-line (if penicillin/amoxicillin allergy), use BOTH:

Clindamycin + Ciprofloxacin	300 mg to 600 mg TID 500 to 750 mg BID	PO PO	7-14 days

Remember to check cultures, revise your diagnosis and consider oral Rx by day 3

Diabetic Foot Infection
Acute Severe

Depth and chronicity of ulcer are not measures of severity, but rather the rapidity of progression. Therapy should be used to prevent potential limb loss or progression to systemic disease (e.g. sepsis). Start with 7 days and adjust regimen as required; duration will be affected by presence of osteomyelitis. Deep tissue cultures should be taken and antibiotic choice tailored to culture results. ID consult is recommended.

First-line (no known or suspected resistance), use BOTH:

Drug	Dose	Route	Duration
Ceftriaxone + Metronidazole	2 g IV q24h 500 mg q12h	IV PO/IV	7-14 days

If septic shock or suspected ceftriaxone-resistance

Piperacillin-tazobactam	3.375 g q6h	IV	7-14 days

If penicillin/ceftriaxone allergy or known resistance

Meropenem	500 mg q6h	IV	7-14 days

→ If MRSA suspected, **ADD**:

Vancomycin	Load 25 mg/kg, then 15 mg/kg q8-12h	IV	7-14 days

Remember to check cultures, revise your diagnosis and consider oral Rx by day 3