EMPIRIC ANTIMICROBIAL THERAPY FOR DIABETIC FOOT INFECTION

(Endorsed by NB Health Authorities Anti-Infective Stewardship Committee February 2016)



Infection Severity	Preferred Empiric Regimens ¹		Alternative Regimens ¹	Comments
 Mild Cellulitis less than 2 cm and without involvement of deeper tissues Non-limb threatening No signs of systemic toxicity 	 Wound less than 4 weeks duration cephalexin 500 mg P0 four times daily* Wound greater than 4 weeks duration sulfamethoxazole/trimethoprim 800/160 mg P0 twice daily* + metroNIDAZOLE 500 mg P0 twice daily 		 Wound less than 4 weeks duration clindamycin 300 – 450 mg P0 four times daily (only if severe β-lactam allergy) Wound greater than 4 weeks duration amoxicillin/clavulanate 875/125mg P0 twice daily* OR doxycycline 100 mg P0 twice daily + metroNIDAZOLE 500 mg P0 twice daily 	 Outpatient management recommended Tailor regimen based on C&S results & patient response
 Moderate Cellulitis greater than 2 cm or involvement of deeper tissues Non-limb threatening No signs of systemic toxicity 	 Wound less than 4 weeks duration ceFAZolin 2 g IV q8h* 0R cefTRIAXone 2 g IV once daily (to facilitate outpatient management when ambulatory administration of ceFAZolin not possible) Wound greater than 4 weeks duration ceFAZolin 2 g IV q8h* + metroNIDAZOLE 500 mg P0 twice daily 0R cefTRIAXone 2 g IV once daily + metroNIDAZOLE 500 mg P0 twice daily (to facilitate outpatient management when ambulatory administration of ceFAZolin not possible) 		 Wound less than 4 weeks duration levofloxacin 750mg IV/PO once daily* (only if severe β-lactam allergy) Wound greater than 4 weeks duration levofloxacin 750mg IV/PO once daily* + metroNIDAZOLE 500 mg PO twice daily (only if severe β-lactam allergy) 	 Initial management with outpatient parenteral therapy with rapid step-down to oral therapy after 48 to 72 hours based on patient response recommended Tailor regimen based on C&S results & patient response
 Severe Systemic signs of sepsis Limb or foot threatening Extensive soft tissue involvement Pulseless foot 	• piperacillin-tazobactam 3.375 g IV q6h*		 imipenem/cilastatin 500 mg IV q6h* OR levofloxacin 750 mg IV once daily* + metroNIDAZOLE 500 mg PO/IV twice daily (only if severe β-lactam allergy) 	 Inpatient management recommended Urgent vascular assessment if pulseless foot Tailor regimen based on C&S results & patient response
Clinical Pearls: ¹ If high risk for MRSA, should include sulfamethoxazole/ trimethoprim 800/160 mg P0 twice daily * or doxycycline 100 mg P0 twice daily for mild infections and vancomycin weight- based dosing to a target trough of 15 – 20 mg/L for moderate- severe infections		 Duration of Therapy Soft tissue only – 2 weeks Bone involvement with complete surgical resection of all infected bone – 2 weeks Bone involvement with incomplete surgical debridement of infected bone – 4-6 weeks IV Bone involvement with no surgical debridement or residual dead bone postoperatively – 6 weeks IV, followed by 6 weeks PO 		
 Destruction, good grycenic control and proper would care are important for the management of diabetic foot infections Cultures: prefer tissue specimens post-debridement and cleansing of wound; surface or wound drainage swabs not recommended 		 Bowering K, Embil JM. Canadian Diabetes Association 2013 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada: Foot Care. Can J Diabetes 37(2013) S145-S149 Lipsky BA, Berendt AR, Cornia PB <i>et al.</i> 2012 Infectious Disease Society of America Clinical Practice Guidelines for the Diagnosis and Treatment of Diabetic Foot Infections. CID 2012:54(12):132-173 		
 In a clinically infected wound a positive probe-to-bone (PTB) test is highly suggestive of osteomyelitis Imaging: recommend plain radiography (radionuclide imaging unnecessary) 		 Lipsky BA, Armstrong DG, Citron DM <i>et al.</i> Ertapenem versus piperacillin/tazobactam for diabetic foot infections (SIDESTEP): prospective, randomized, controlled, double-blinded, multicentre trial. Lancet 2005; 366:1695 – 1703 Blond-Hill E, Fryters S. Bugs & Drugs An Antimicrobial/Infectious Diseases Reference. 2012. Alberta Health Services 		
* Dose adjustment required in renal impairment				