

Chronic Osteomyelitis

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Dear brothers and sisters all over the world, your feedback is encouraged and more than welcome

51 y.o. M was sent to the ER by podiatry clinic for sero-sanguineous drainage from right foot. Has history of bilateral chronic foot ulcers with right trans-metatarsal amputation 2 years ago.

PMH: Diabetes Mellitus with neuropathy, HTN, Osteomyelitis

Vitals: BP 124/60, Pulse 78, Temp 98.6°F, RR 16, SaO2 99% on Room Air

17.0	9.9	72.1	136	100	61	8.5
	29.9	243	4.2	18	5.5	296
Protein :	7.5	Amylase:	114	CRP:	15.7	
Albumin :	3.8	Lipase:	77	ESR:	100	
Bilirubin :	0.5	B-H.butyrate:	0.27			
ALT :	24	Iron :	23	PT:	12.3	
AST :	19	TIBC :	211	PTT:	29.8	
ALK Phos :	82	Ferritin :	111	INR:	1.0	



Assessment/Plan:

Patient was diagnosed with acute on chronic renal failure. Bone biopsy and cultures was done which resulted chronic osteomyelitis secondary to MRSA. Due to vancomycin associated nephrotoxicity, treated with linezolid.

Hospital course:

Fever and leukocytosis improved. Renal failure improved with hydration. Was discharged on linezolid 600 mg BID with outpatient infectious diseases follow up. Vitamin B6 50 mg PO daily is recommended to prevent peripheral neuropathy and optic neuritis with longer duration of linezolid therapy.

Teaching point: Osteomyelitis

- Acute hematogenous osteomyelitis is most frequently caused by *S. aureus*
- Vertebral osteomyelitis may be due to *S. aureus*, gram-negative bacilli, or *Mycobacterium tuberculosis*.
- Osteomyelitis associated with a contiguous focus of infection may be due to *S. aureus*, gram-negative bacilli, coagulase-negative staphylococci, or anaerobes.
- Chronic osteomyelitis is usually associated with a sequestration of necrotic bone and may involve gram-negative pathogens as well as *S. aureus*.

Conclusion:

Cure typically requires at least 4 to 6 weeks of high-dose antimicrobial therapy. Parenteral therapy should be given initially; oral regimens may be considered after 2 to 3 weeks if the pathogen is susceptible and adequate bactericidal levels can be achieved. (*Clin Infect Dis* 2012;54:403).

References:

Godara, H. et al. (2014). The Washington Manual of Medical Therapeutics. Walters Klower Health, 480.