Primarily Non-Surgical Management of Osteomyelitis of the Foot in Diabetes

Reference:

Scientific Literature Review

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Podiatric Relevance:
This retrospective study evaluates the treatment of osteomyelitis in the diabetic patient with conservative antibiotic therapy as opposed to immediate surgery.

Methods:
The medical records of 147 patients were reviewed over a 5 year period at a single specialist center. All patients had been diagnosed with osteomyelitis according to x-ray and clinical findings. If still unsure of a diagnosis, MRI and labeled white blood cell scans were used as confirmatory tests. Each patient was evaluated on a 12 month outcome from time of treatment.

Results:
23% (34/147) of patients progressed quickly to surgery because of either limb-threatening infection or failure to respond to antibiotics. The other 113 patients were managed non-surgically. Of the 147 patients, 26 (18%) were admitted to the hospital for intravenous antibiotics which generally consisted of gentamicin, amoxicillin/ampicillin, and metronidazole, or clindamycin plus a quinolone. Inpatients were switched to an oral course prior to discharge. All other patients were treated with an oral antibiotic course that generally consisted of augmentin or clindamycin plus a quinolone. A third of those patients later had a change in antibiotics during their treatment course because of either a microbiological sampling or because of a limited clinical response. The oral antibiotic course consisted of no less than 6 weeks. Of the 113 patients, 66 (58%) remained in remission at the one year mark while 35 (31%) had a relapse that required a further antibiotic course. Of the 35 patients that relapsed, 27 (77%) achieved remission after further oral antibiotics while 8 (23%) progressed to surgical intervention. Overall, of the 113 patients who underwent antibiotic therapy for the treatment of osteomyelitis, 93 (82.3%) were in remission at one year.

Conclusion:
While emergent surgery is indicated in some cases of osteomyelitis, this study does show that antibiotic therapy is a viable option within this patient population.