Diabetes Metab Syndr. 2017 Apr - Jun;11(2):149-156. doi: 10.1016/j.dsx.2016.06.023. Epub 2016 Jun 18.

Understanding Diabetic Foot Infection and its Management.

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Abstract: Diabetic Foot Ulcers (DFUs), a dreadful micro-vascular complication is liable for substantial increase in morbidity and mortality. DFU is a complicated amalgam of neuropathy, peripheral arterial diseases, foot deformities and infection. Spanning the spectrum from superficial cellulitis, microbial flora leads to chronic ostemyelitis and gangrenous extremity lower limb amputations. Wounds without affirmation of soft tissue or bone infection do not require antibiotic therapy. Treatment of mild and moderate infection requires empiric therapy covering gram-positive cocci, whereas severe or infection caused by drug resistant organisms needs broad spectrum anti-microbial targeting aggressive gram-negative aerobes and obligate anaerobes. Definitive therapy employed should be based on culture reports and clinical response. Evaluation of bone infection requires imaging by plain radiographs or MRI to increase sensitivity and specificity. Surgical interventions are must and may range from minor debridement to resections or revascularization and major amputations depending upon wound severity. On time and forceful management of diabetic foot ulcers by employing multidisciplinary management approaches focusing on prevention, learning, regular foot assessment, aggressive intervention, and optimal use of therapeutic footwear can often prevent exacerbation of the difficulty and eliminate the potential for amputation. Here, we review recent studies addressing diabetic foot infections with emphasis on pathophysiology, exclusive risk factors; evaluation including physical inspection, laboratory investigations, relevant treatment strategies and assessment of infection severity.

PMID: 27377687