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Diabetic Foot Infections: Pathology, Treatment and Prevention

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Introduction

Foot infections are the most common cause of amputation that is not painful for people with diabetes. Many diabetic foot infections require systemic antibiotic treatment and the first choice is often indicated. Although there are many antibiotics available, uncertainty exists as to which is the best treatment for the infections. Diabetes mellitus is a pathology that results directly in peripheral arterial disease and sensory neuropathy affecting the feet in diabetes mellitus; it is a chronic form of diabetes mellitus. Because of the peripheral nerve dysfunction associated with diabetes, patient's feet have a reduced ability to feel pain and dryness of the skin. This means that minor injuries may remain undiagnosed and may lead to a severe diabetic foot ulcer. In addition, foot surgery is well tolerated without anesthesia. Prevention of diabetic foot may include improving metabolic control by controlling blood sugar levels; identification and testing of people at high risk of developing foot ulcers, especially those with advanced painless neuropathy; and patient education to improve foot selfexamination and foot care knowledge. Patients will usually be instructed to check their feet for hyperkeratosis, fungal infections, skin lesions and deformities of the feet. Shoe control is also important as repeated trauma from sturdy shoes can be an exciting factor, especially where peripheral neuropathy is present. Evidence is limited that poor patient education outcomes have a long-term effect on prevention. Recent work has carefully reviewed existing footwork guidelines, with a view to assessing their completeness in relation to clinical practice, technological advancement, and changes in the social structure. This work has clearly demonstrated that the limitations of the currently available guidelines and the lack of evidence on which the guidelines are based are responsible for current gaps between guidelines, general clinical practice, and problem development. In order to improve general recommendations and daily clinical practice, you will need to pay close attention to both the limitations of the guidelines and the basic evidence. Treatment of diabetic foot ulcers can be challenging and time consuming; may include bone marrow transplants, surgery and

antimicrobials and clothing. Many diabetic foot infections require treatment with systemic antibiotics. The choice of first-line antibiotic treatment depends on a number of factors, such as the severity of the infection, whether the patient has received antimicrobial treatment, and whether the infection is caused by a small known allergy. Other non-invasive studies have suggested that ertapenem with or without vancomycin is more effective in achieving clinical resolution than tigecycline. Otherwise the related effects of different antibiotics are unclear. Evidence levels are low due to limitations in the composition of the included trials and significant differences between them in the variety of antibiotics tested, the duration of treatment, and the points of time in which the results were tested. One of the most common problems for people with diabetes is a disorder of the feet, especially sores on the feet or wounds. These wounds can be easily infected, and they are known as diabetic foot disease. If left untreated, infection can progress rapidly, involving deep tissue and survival of the infected organ. These diseases sometimes conclude that the affected organ needs to be amputated. It is not yet clear if any particular lethal drug is better than any other treatment for infection or to avoid amputation. And it is often unclear whether different antibiotics are associated with more or less side effects. Evidence for the interrelated effects of various antimicrobials in the treatment of foot infections in diabetes are very diverse and often at low or high risk of bias. It is therefore unclear whether there is an effective treatment for antiretroviral drugs that is better than others in resolving the infection or in terms of safety.

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