Clinical Research on Foot & Ankle
ISSN: 2329-910X

Commentary Open Access

A Commentary on Diabetic Foot Infections

Jake P. Heiney

Department of Orthopedic Surgery, University of California, USA

Diabetic foot is a terrible disability that can lead to long periods of hospitalisation and impossible, growing costs, as well as the dreaded ultimate consequence of an amputated leg. On the already demoralised mentality, the phantom limb plays its own terrible joke. It's no surprise that the diabetic foot is one of the most feared diabetes complications.

The basic trio of neuropathy, ischemia, and infection characterises diabetic foot.The diabetic foot should be avoided as much as possible. This can be done by identifying people who are at high risk, such as those who have peripheral neuropathy, peripheral vascular disease, foot abnormalities, or calluses.

Foot Infection

Because of certain anatomical features, the consequences of deep infection in a diabetic foot are more severe than elsewhere; infection in a diabetic foot is a limb-threatening condition. The foot has multiple compartments that are interconnected, allowing the infection to travel from one to the next, and the lack of pain permits the patient to maintain ambulation, allowing the infection to spread even faster. Soft tissues in the foot, such as the plantar aponeurosis, tendons, muscle sheaths, and fascia, are susceptible to infection.

Classification

There are two main forms of diabetic foot.

- The Neuropathic Foot is characterised by neuropathy.
- The Neuroischemic Foot, in which occlusive vascular disease is the primary cause, despite the presence of neuropathy.

Fissures, bullae, neuropathic (Charcot) joint, neuropathic edoema, and digital necrosis are all symptoms of neuropathy. Ischemia causes pain during rest, ulceration on the foot's borders, and dizziness.

Examination of Feet

Examination of the feet is an integral part of the physical examination of every patient, more so a diabetic patient. Dry skin, fissures, deformities, callus, aberrant foot shape, ulceration, prominent veins, and nail lesions are all signs of neuropathic alterations. Interdigital spaces should be given special attention. Hair loss on the dorsum of the foot and a dependent rubor are signs of significant ischemia.

Examine the peripheral pulsations, such as the dorsalis pedis, which can be felt lateral to the exensor hallucis longus tendon, and the posterior tibial, which is above and behind the medial malleolus, for warmth or coldness. For the presence of bruit, the femoral artery should be palpated and auscultated.

Monofilaments and biothesiometry can be used to test sensory neuropathy. If these aren't accessible, mild touch detection with cotton wool, pinprick, and vibration detection with a 128 Hz tuning fork would suffice. The purpose is to see if the patient has lost protective feelings (LOPS), which makes him vulnerable to foot ulcers.

Dressing Material

The choice of wound dressings is an important part of diabetic wound care therapy. For example, saline-soaked gauze dressings are low-cost, well-tolerated, and contribute to a non-traumatic, moist wound environment.New dressing materials have been developed in a wide range of applications.Film dressings, foam dressings, and non-adherent dressings are examples of modern dressings.

For the treatment of diabetic foot ulcers, a number of supplementary wound care treatments are being investigated and used. Human skin analogues have been proven to improve wound healing in diabetic ulcers by stimulating tissue growth and wound closure through the action of cytokines and dermal matrix components. A recombinant platelet-derived growth factor, which has been found to promote wound healing, is also in use. It's a recombinant human PDGF-BB gel formulation for neuropathic ulcers that aren't infected. It's applied to the wound and covered with a saline-soaked, non-adherent gauze bandage.Every day, the dressing is changed once or twice. It must be understood that this gel therapy is only beneficial if other modalities are followed, such as recurring surgical debridement of the ulcer and unloading.

Prevention

The frequency of wound development can be reduced if potential risk factors for ulceration are identified early. It is suggested that all diabetic patients have their feet examined at least once a year to discover the circumstances that predispose them to ulceration.

Patients should be taught on the need of proper glycemic management, wearing appropriate footwear, and avoiding certain foods.

Prevention of diabetes includes

- Primary Prevention:Foot screening and suitable footwear guidance for high-risk feet
- Secondary Prevention: Treatment of minor foot lesions, such as callus removal, nail diseases, blisters de-roofing, and so on.
- Tertiary Prevention: Advanced foot lesions should be sent to a professional as soon as possible.

***Corresponding author:** Jake P. Heiney, Department of Orthopedic Surgery, University of California, USA, Email: jakeheiney@ameritech.net

Received: June 14, 2021; **Accepted:** June 28, 2021; **Published:** July 5, 2021

Citation: Jake P. Heiney (2021) A Commentary on Diabetic Foot infections. Clin Res Foot Ankle 9: 311.