

Management, Complications, Causes and Prevention of Diabetic Foot Ulcers

Cyrillein Gill*

Department of Endocrinology, Lund University, Malmo, Sweden.

ABOUT THE STUDY

Diabetic foot, a complication of diabetes, may not be as well-known as some other diabetes-related issues, but it is a serious and potentially life-altering condition. For those living with diabetes, maintaining good foot health is crucial.

Understanding diabetic foot

Diabetic foot is a term used to describe a range of foot-related complications that can arise in people with diabetes. These complications typically result from long-term high blood sugar levels that damage nerves and blood vessels in the feet. The two primary factors contributing to diabetic foot problems are neuropathy (nerve damage) and peripheral vascular disease (poor blood circulation).

Causes of diabetic foot

Neuropathy: High blood sugar levels can damage the nerves in the feet, leading to loss of sensation. Patients with neuropathy may not feel pain, heat, or cold, making them unaware of injuries or infections.

Peripheral vascular disease: Diabetes can also cause narrowing and hardening of blood vessels in the legs and feet, reducing blood flow to these areas. Poor circulation impairs the body's ability to heal wounds and fight infections.

Symptoms of diabetic foot

Numbness or tingling: Patients often experience numbness or tingling in the feet, which can progress to complete loss of sensation.

Foot ulcers: Open sores or ulcers can develop due to minor injuries or pressure points that go unnoticed. These ulcers are slow to heal and prone to infection.

Infections: Bacterial or fungal infections can occur in diabetic foot ulcers, leading to cellulitis or even more severe conditions like osteomyelitis (bone infection).

Charcot foot: This condition, also known as Charcot arthropathy, causes the bones in the foot to weaken and fracture, often leading to deformities.

Gangrene: Severe cases of infection or impaired blood flow can lead to gangrene, a condition where tissue dies due to insufficient blood supply. Amputation may be necessary in extreme cases.

Complications

Diabetic foot complications can have devastating consequences if left untreated. Amputation is one of the most serious outcomes, and diabetes is the leading cause of non-traumatic lower limb amputations worldwide. The emotional and physical toll of amputation on individuals and their families cannot be overstated.

Preventing diabetic foot complications

It should be a priority for anyone living with diabetes. Some key strategies to reduce the risk are:

Blood sugar control: Maintaining target blood sugar levels is paramount. Regular monitoring and adherence to prescribed medications or insulin therapy are essential.

Foot care education: Patients should be educated on proper foot care, including daily inspection, washing, moisturizing, and nail trimming. It's essential to encourage patients to seek medical attention for even minor injuries or abnormalities.

Footwear: Wearing comfortable, well-fitting shoes is crucial. Patients should avoid tight or pointed shoes and ensure that shoes have ample cushioning and support.

Regular check-ups: Regular foot examinations by healthcare professionals, including podiatrists, are essential. These examinations can detect early signs of problems and provide guidance on preventive measures.

Smoking cessation: Smoking is known to worsen peripheral vascular disease. Encouraging patients to quit smoking can significantly improve blood circulation in their feet.

Management of diabetic foot

If diabetic foot complications do occur, early intervention is crucial to prevent further deterioration. The management of diabetic foot may involve:

Correspondence to: Cyrillein Gill, Department of Endocrinology, Lund University, Malmo, Sweden, E-mail: gillcyr@edu.sw

Received: 06-Nov-2023, Manuscript No. FMMSR-23-26695; **Editor assigned:** 09-Nov-2023, PreQC No. FMMSR-23-26695 (PQ); **Reviewed:** 24-Nov-2023, QC No. FMMSR-23-26695; **Revised:** 01-Dec-2023, Manuscript No. FMMSR-23-26695 (R); **Published:** 08-Dec-2023, DOI: 10.37532/2327-4972.23.12.163

Citation: Gill C (2023) Management, Complications, Causes and Prevention of Diabetic Foot Ulcers. J Fam Med Med Sci Res. 12:163.

Copyright: © 2023 Gill C. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Wound care: Skilled wound care is essential for treating foot ulcers. This may include cleaning the wound, debridement (removal of dead tissue), and dressing changes.

Antibiotics: In cases of infection, antibiotics are prescribed to control and eliminate the infection.

Revascularization: For severe peripheral vascular disease, procedures like angioplasty or bypass surgery may be necessary to improve blood flow.

Offloading: The use of orthopedic devices or casts can help redistribute weight and relieve pressure on ulcerated areas.

Amputation: In extreme cases where tissue damage is extensive and uncontrolled, amputation may be the only option to save the patient's life.

Diabetic foot is a severe and often underestimated complication of diabetes. It can have devastating consequences, including amputation, if not properly managed. However, with early detection, proper foot care, and medical intervention, the risks associated with diabetic foot can be significantly reduced. It is essential for healthcare professionals, individuals with diabetes, and their families to prioritize foot health and work together to prevent and manage this silent threat effectively.