

Inpatient management of acute diabetes-related foot disease - Full Clinical Guideline

Reference no.: CG-DIAB/1588/23

1. Introduction

To provide guidance for the treatment of inpatients with acute diabetes-related foot disease in line with NICE [NG19] & the International Working Group on the Diabetic Foot (IWGDF) guideline (1,2).

2. Aim and Purpose

The aim of this guideline is to ensure the prompt identification and treatment acute diabetes-related foot disease in inpatients with diabetes.

3. Definitions, Keywords

Acute diabetes-related foot disease:

- Newly developed foot ulcer.
- Presence of infection
 - the presence of at least 2 of the following: local swelling or induration, erythema, local tenderness or pain, local warmth, or purulent discharge
- Presence of inflammation.
- Swelling or new foot deformity.
- Acute pain in the absence of trauma.

Active Charcot neuro-osteoarthropathy: The presence of a red, warm, swollen foot with osseous abnormalities on imaging in a person with diabetes mellitus and neuropathy.

Multidisciplinary foot care team: consists of healthcare professionals (normally including diabetologists & surgeons) with the specialist skills and competencies necessary to deliver inpatient care for patients with diabetic foot problems.

Gangrene: A condition that occurs when body tissue dies, due to insufficient blood supply, infection or injury. Without infection this generally results in dry and black tissue, frequently called dry gangrene; when the tissue is infected, with accompanying putrefaction and surround cellulitis, it is often called wet gangrene.

Necrosis: Devitalized (dead) tissue.

4. Acute management

- **Within 24 hours** of the patient being admitted or a foot problem being detected the patient should be referred to the Diabetes Team.
- If the acute diabetes-related foot disease is the dominant clinical problem then the multidisciplinary foot care team will expect the patients care to be transferred to them.

Initial Examination and Assessment

- Within first 4 hours of admission
 - **** Remove the patients' shoes socks and any dressings. ****
 - Both feet should be examined for pulses and sensation.
 - Record the size and depth of any ulcer.
 - Assess the foot and the patient for signs and symptoms of infection.
 - If there are signs of infection antibiotics should be given promptly in line with local microbiology guidelines based on the severity of the infection.
- 4-24hours
 - Where infection is suspected then appropriate microbiology tissue sampling (preferably a fine needle aspirate) should be performed.
 - If there is unexplained new deformity, swelling, redness or warmth of the foot then active Charcot neuro-osteoarthropathy must be considered. The patient should be made non-weight bearing until reviewed by the Multidisciplinary foot care team.
 - Xray should be considered if osteomyelitis or active Charcot neuro-osteoarthropathy is suspected.
 - If acute limb ischaemia is present (e.g. onset of gangrene or necrosis or rest pain within the last 14 days) then refer urgently to the vascular team.
 - The need for urgent surgery should be assessed by an experienced surgeon.
 - Other aspects of diabetes, including glycaemic control, should be addressed.
- Ongoing Management Ulcers:
 - Debridement- should only be done by trained members of the multidisciplinary team.
 - Wound Dressings- considering the wound and patient preference, dressings with the lowest acquisition cost should be used. A simple non-adherent dressing can be used in most circumstances.
 - Pressure relief-strategies should be adopted.
 - Infection should be managed inline with current antibiotic guidelines.
 - If osteomyelitis is suspected but the X-Ray is normal then consider an MRI scan (but do not delay initiation of antibiotics.)

5. References:

1. Practical Guidelines 7 Guidelines Development and methodology IWGDF Guidelines on the prevention and management of diabetes-related foot disease IWGDF Guidelines [Internet]. Available from: www.iwgdfguidelines.org
2. Diabetic foot problems: prevention and management NICE guideline [Internet]. 2015. Available from: www.nice.org.uk/guidance/ng19

6. Documentation Controls (these go at the end of the document but before any appendices)

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	1				Merged UHDB Version
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Training and Dissemination: How will you implement the Clinical Guideline, cascade the information and address training					
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7. Appendices