FDUK diabetic foot infection consensus document

Demystifying Infection in the diabetic foot

Key points

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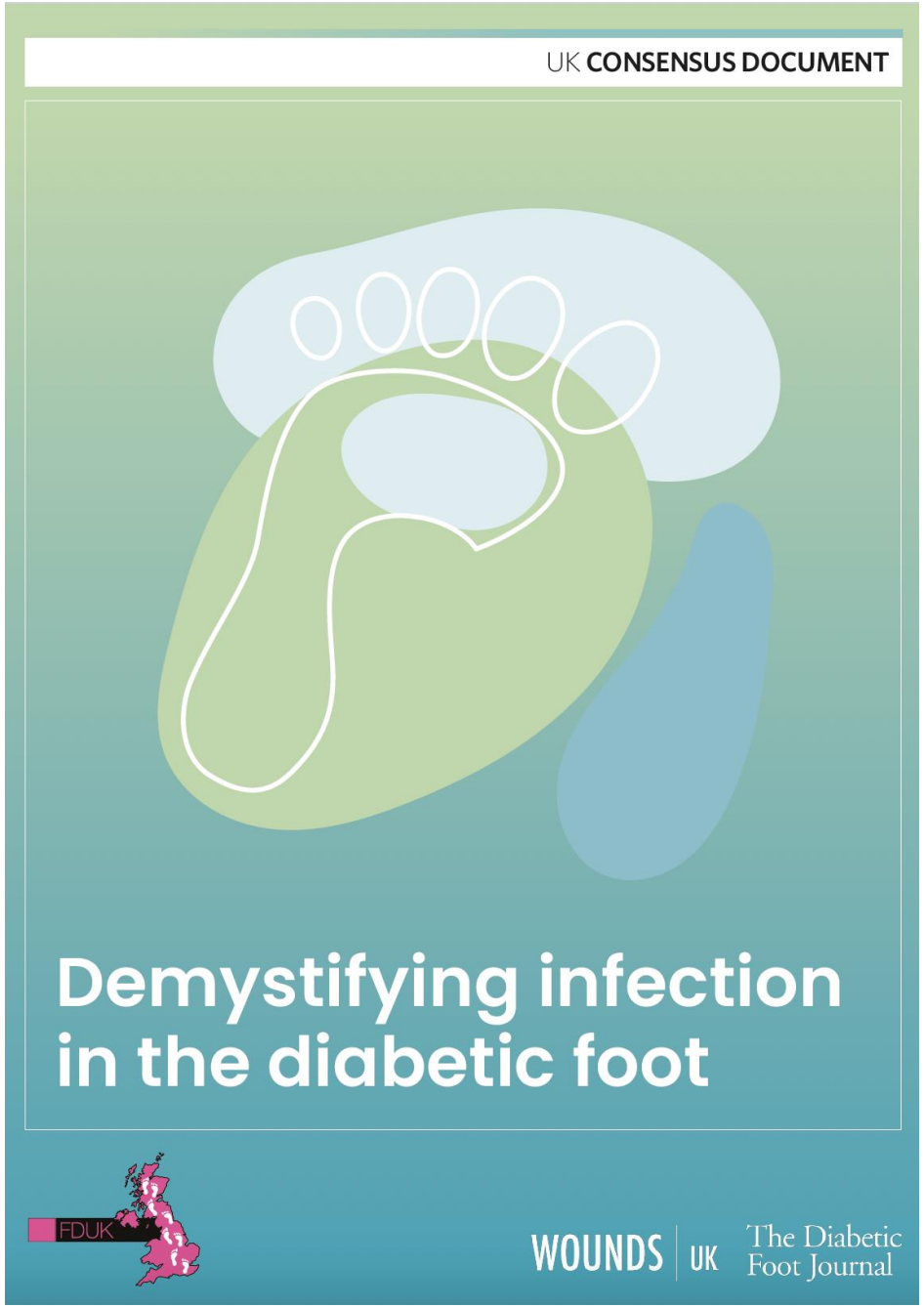

Consensus was developed by an Expert Panel chaired by Jacqui Fletcher, Independent Nurse Consultant

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Expert Panel

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Demystifying infection in the diabetic foot

- Infection is the greatest destroyer of the diabetic foot

- An ‘immediate threat’ to a person with diabetes (International Working Group on the Diabetic Foot [IWGDF] Practical Guidelines, 2023).

Demystifying infection in the diabetic foot

Infection can lead to necrosis/gangrene

An infected, necrotic DFU

Infected, necrotic heel ulceration

A DFU depicting infected wet necrosis (from a patient with neuropathy)

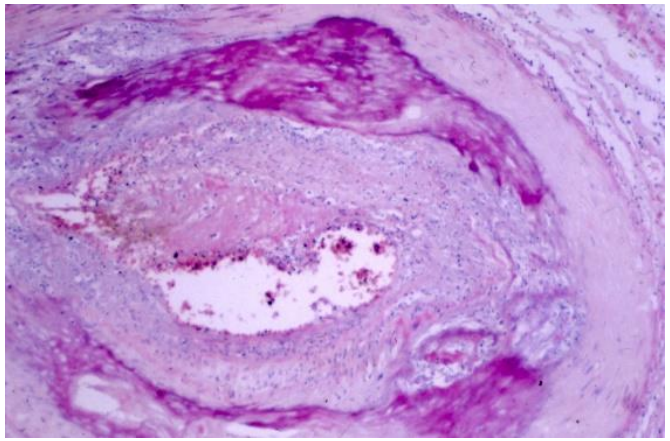
Figure 1a: First presentation of several DFUs in people with diabetes.

Demystifying infection in the diabetic foot

Early diagnosis by the first attender is important

- Primary care
- Community care
- Secondary care

Early diagnosis of infection



Demystifying infection in the diabetic foot

- Diagnosis of infection is the responsibility of all HCPs, both in primary and secondary care, looking after persons with diabetes

- Rapid treatment with antibiotics can readily prevents the development of an important type gangrene –infective gangrene in the diabetic foot

- All HCPs can play an important role in achieving this

The objective of this consensus

To provide information to UK HCPs, especially those in primary care and support roles

To improve knowledge which will facilitate

- Prompt identification of diabetic foot infections (DFIs)
- Timely access to initial antibiotic treatment

Outline

- Identification of diabetic foot infections
- Immediate steps in DFI management
- Referral to the MDFT
- Antibiotic stewardship

Identification of diabetic foot infections (DFIs)

- The IWGDF/IDSA guideline(2023) provides one of the most commonly used definitions of a DFI

- It states: ‘Diagnose a soft tissue diabetes-related infection clinically, based on the presence of local or systemic signs and symptoms of inflammation’

Infection is identified by

The presence of at least two of these classic signs

- Local swelling or induration
- Erythema
- Local tenderness or pain
- Local increased warmth
- Purulent discharge

- No other cause of an inflammatory response of the skin (e.g. trauma, gout, acute Charcot neuro-arthropathy, fracture, thrombosis, or venous stasis).'

IWGDF/IDSA guideline (2023)

The challenge in identification of infection for many frontline HCPs.

- Two or more signs may not always be apparent.

The IWGDF/IDSA guideline (2023) highlights this point :

‘In persons with diabetes-related foot complications, signs and symptoms of inflammation may, however, be masked by the presence of

- Peripheral neuropathy
- Peripheral artery disease (PAD)
- Immune dysfunction’

Recommendations in identifying DFI

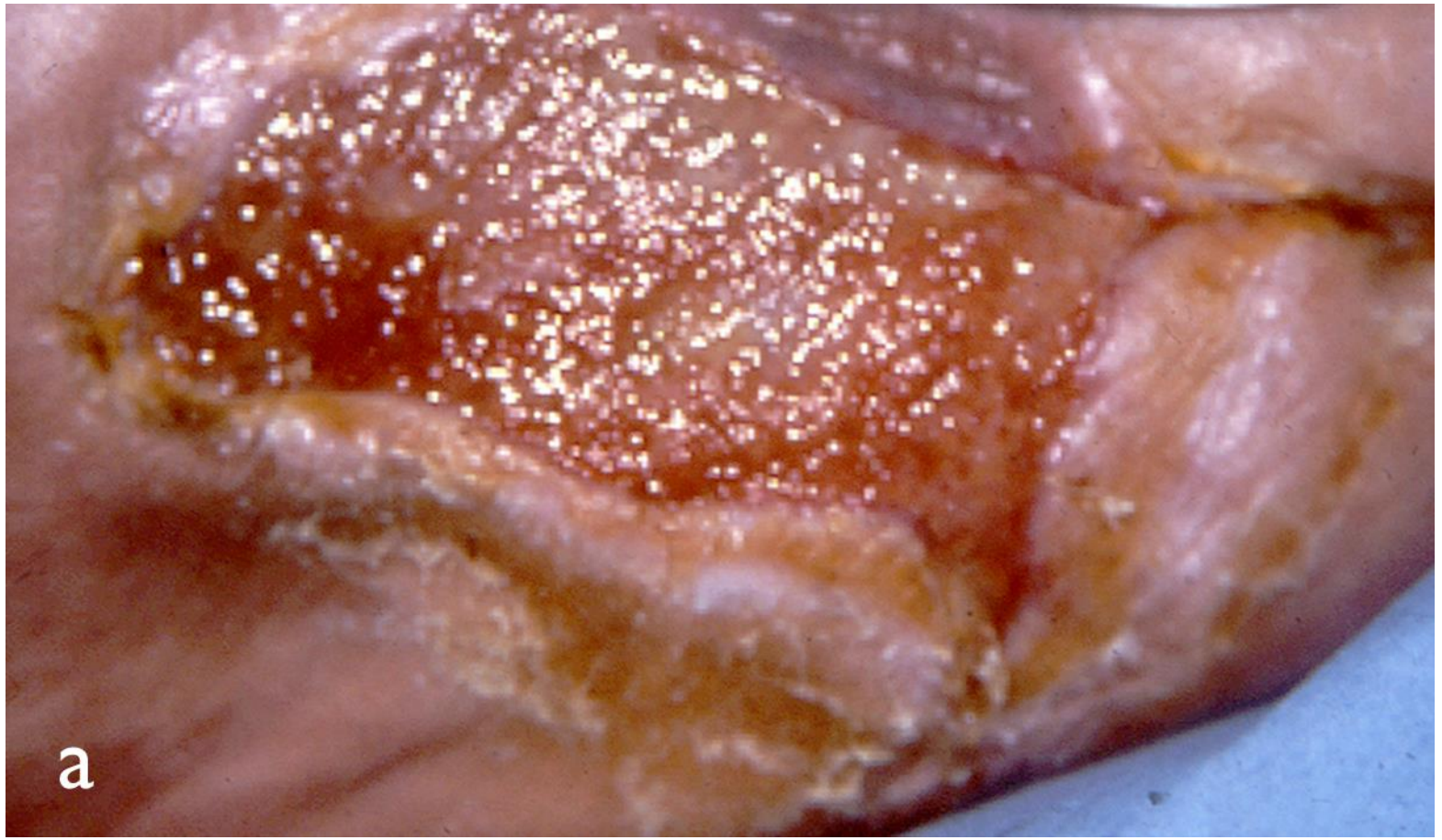
- Be suspicious – 50% of ulcers are likely to be infected
- Even a small suspicion of infection in a ‘borderline’ case should prompt action
- Seek assistance if unsure
- Remember that, in addition to the classical signs of infection described in DFI guidelines, there may be other signs of DFIs

Early signs of infection

Base of ulcer changes from pink granulation to grey tissue

Early signs of infection

Increased friability of granulation tissue



Signs of infection

- Quantity of wound exudate greater than would be expected from a wound of a particular size
- Wound breakdown/enlargement
- There is malodour associated with the wound
- New, increased or altered pain
- Lymphangitis (lines tracking away from the wound towards or up the leg)

Spreading infection- lymphangitis

Spreading infection- lymphangitis

Signs of infection

- Periwound oedema
- Crepitus or warmth spreading into periwound area
- Erythema spreading from wound edge

Erythema spreading from wound edge