

GANGRENE: A SERIOUS CONDITION - ITS IMPACTS AND MODERN TREATMENT APPLICATIONS

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WHAT IS GANGRENE?

Gangrene is the ischemic necrosis of tissue resulting from inadequate blood supply, infection, or injury.

Types of Gangrene

1. Wet gangrene (infected)
2. Dry gangrene (aseptic state)

Symptoms

Pain, discoloration, swelling, coldness, Loss of protective sensation (LOPS).

IMPACT AND RISK FACTORS

Peripheral Artery disease (PAD)

Diabetes Mellitus

Trauma and Wounds

Infection

Serious Consequences

Amputation Risk Systemic illness (sepsis)

Identification of a Person with a High Risk

Foot

Foot ulcer

Loss of protective sensation (LOPS)
pressure preception, vibration preception
Vascular status

Role of Podiatrist

Early diagnosis (which can prevent amputation), wound management (prevents severe risk of spread of infection), patient education, proper foot related care, post treatment rehabilitation.

Modern Treatments

Re-vascularisation (Bypass graft, Angioplasty), Surgical debridement (Removal of dead tissue), Antibiotics, Wound care and offloading (Advanced dressings and Negative Pressure Therapy), Systemic management (Blood sugar, Nutrition).

Emerging treatments

Hyperbaric oxygen therapy (HBOT) , Bioengineered skin substitutes .



IWGDF. Practical Guidelines on the Prevention and Management of Diabetes-Related Foot Disease. International Working Group on the Diabetic Foot; 2023.
DFU.com.tw. What is Gangrene? From Vascular Occlusion to Infection. Diabetic Foot Care; 2024.