



# Diabetic foot

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# Patient profile

- **Name : M.A.**
- **Age: 50 years old**
- **Occupation: labourer**
- **Residence: موصل/ حي الشفاء**
- **D.O.A: 11/1/2013**
- **D.O.I: 12/1/2013**
- **D.O.E: 15/1/2013**

# Chief complaint

- Toes swelling of the left foot for 10 days duration.

# History of present illness

- Middle age man with **type 2 uncontrolled diabetes mellitus** & on **insulin** therapy
- presented as **left foot swelling** for **10 days**, the condition started when patient`s foot **burned** by a hot floor before 3 months in Makka

# History of present illness

- The condition continue to deteriorate as a discharge from a sinus in the big toe which was brown in colour & unpleasent odour with black discoloration of the foot.
- The sinus increased in depth & discharge continued until the inflammation arrived to the ankle & numbness developed with mild fever.

# History of present illness

- Patient admitted to the hospital for further management at 11/1/2013
- 1) In the hospital the diabetes was controlled &
  - 2) I.V antibiotics were given to the patient,
  - 3) then surgical amputation of the big toe done for him.


# Review of other systems

- Not remarkable except for polyuria.

## Past medical history

- Diabetes mellitus since 30 years.
- Heart failure since 7 years.

## Past surgical history

- Cholecystectomy : 12years ago .
  - 2nd toe amputation before 5 years.
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# Drug history & Allergy

- Insulin 30 unit in the morning & 30 unit in the evening.
- Sublingual nitrate
- Isosorbide dinitrate 10 mg 2×1
- No known allergy for given medications.

# Family history

- His father was having **diabetes mellitus**.

## Social History

- Moderate socioeconomic status.

# General Examination

- Middle age man looks conscious, alert, comfortable, with good body build, not dyspnoic, not jaundiced & not anaemic.
- Afebrile, normal mouth, no L.N enlargement & has cannula on the dorsum of the hand .

# Vital signs

- Pulse rate: 80 BPM
- Blood pressure: 120/80 mmHg
- Temperature: 37°c
- Respiratory rate: 15 breaths/min



**Local examination revealed**  
**ulcer of foot**  
**Inspection**

- site: planter surface of big toe
- Size: 1.2cm
- Shape: rounded
- Edge: sloping
- Discharge: brown colour
- Odour: bad odour



**Local examination revealed**  
**ulcer**  
**Palpation**

- Base: indurated
- Depth: 1cm
- Relation: fixed
- Tenderness: -ve
- Temperature: normal

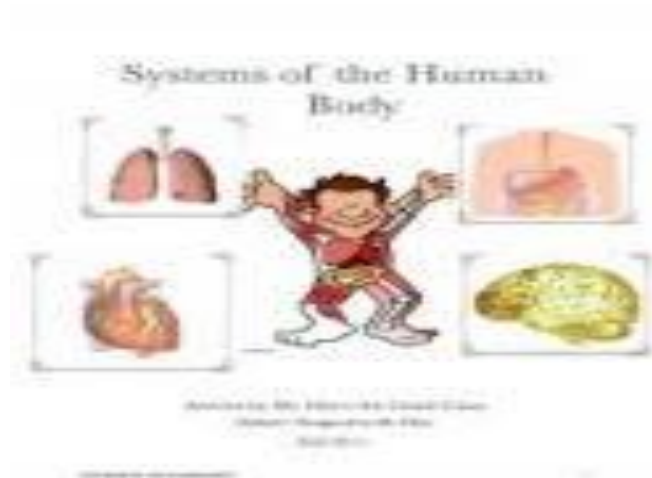
## Local examination

### Palpation

- Sensory level: touch & pain were –ve distally till the ankle joint.
- Motor & reflexes: normal
- Arterial examination: posterior tibial, dorsalis pedis, popliteal & femoral arteries all were positive.

# Systemic Examination

**Other systems  
were normal**





# Investigation

- Investigations :  
Fasting blood sugar.  
Sugar in urine  
Ketone in urine  
HbA1c  
Echo  
ECG  
Lipid profile  
RFT



**Culture & sensitivity – not sent !!!!**

**fasting Blood Sugar :normal**

**Doppler US of left As & Vs are normal**

# Investigation

- X-ray



# Diabetic foot

Diabetic foot is related to three factors:

1. Trophic changes from peripheral neuropathy.
2. Ischemia as a result of atheroma.
3. Low resistance to infection because of excess sugar in the tissues.

# Diabetic foot



# Diabetic foot

- The neuropathy impairs sensation and thus favours the **neglect** of minor injuries and infections.
- Motor involvement is frequently accompanied by **loss of reflexes** and **deformities** (neuropathic joints).
- Thick callosities develop on the sole and bad foot care may allow the **entry of infection**.

# Diabetic foot

Major arterial disease is associated if there is:

- No palpable dorsalis pedis & posterior tibial arteries.
  - Presence of rest pain.
  - Presence of intermittent claudication.
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- Bacteriological examination is made if any pus and a radiograph may reveal the extent of any osteitis.

## Risk factor

1. Tight shoes
2. Nail cutting
3. Increased weight
4. Drying skin
5. Deformity of foot
6. Walking on foot without support





# Diabetic foot

Treatment consists of:

- 1) Bringing the diabetes **under control** by diet and drugs.
- 2) A rapid spread of infection requires drainage by **incision** and the **removal of any obviously dead tissue**.



# Diabetic foot

Sometimes, especially with **digits**, amputation can be **avoided**.  
Conservative treatment involves:

- Keeping the affected part **absolutely dry**.
- Exposure to the **air** and the use of a **fan** may assist in the **desiccation process** and may **relieve pain**.
- The limb must **not be heated**.
- Local pressure areas, e.g. the skin of the heel or the malleoli, must be **protected** if fresh patches of gangrene are not to occur in these places.
- Occasionally, the lifting of a crust or the removal of hard or desiccated skin helps demarcation or releases pus and relieves pain.

# Prevention of diabetic foot

- 1) ?
- 2) ?
- 3) ?
- 4) ?
- 5) ?
- 6) ?



- 1) **Mechanical control**
- 2) **Metabolic&hemodynamic control**
- 3) **Vascular control**
- 4) **Microbiological control**
- 5) **Wound control**
- 6) **Educational control**

**Thank you for listening**