



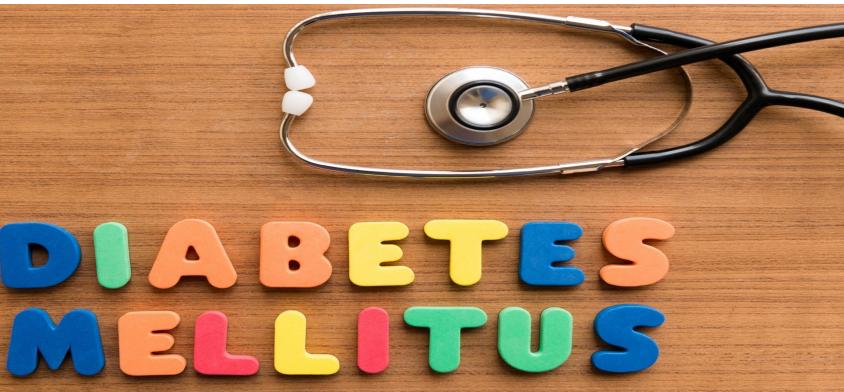
# A CASE STUDY ON **DIABETES MELLITUS**

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Diabetes is not the END, it's the BEGINNING of a  
new way of LIVING



# Objectives of Case study Presentation

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- To share experience and knowledge with participants.
- To get feedback from the participants for further improvement.
- To provide brief note on Diabetes mellitus and its complications



# DIABETES MELLITUS

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Diabetes mellitus is a metabolic disease characterized by high blood sugar levels due to the pancreas not producing enough insulin or the body not effectively using the insulin it produces





# Incidence and prevalence of DM

## Global Increase:

The number of people with diabetes rose significantly from 200 million in 1990 to 830 million in 2022, with the fastest rise in low- and middle-income countries.

## India's Burden:

Diabetes prevalence and chronic complications are substantial in India, with widespread disparities between states. For instance, a large number of Indians have untreated diabetes, and rates have almost doubled in the last three decades.



# Patient Information

**Name:** Mr.X

**Age:** 75 years

**Gender:** Male

**Date of admission:** 10/09/25

**Date of discharge:** 15/09/2025

**Chief complaints:** chest tightness since 10 days, graft site edema since 5 days, foot numbness and tingling sensation since 4-5 months.



## Present health history:

- Patient has history of HTN for 13 years under medication (Telma H 40mg OD)
- He is Diabetic and under insulin therapy for about 12 years
- Feeling of weakness since 6 months, chest tightness since 10 days, edema graft site since 10 days and foot tingling and numbness since 4-5 months.
- Loss of weight and frequent micturition.
- Blurred vision in right eye
- Gastric symptoms like gastric irritation



## Past medical history:

- Patient was a known case of hypertension since 13 years
- He had Triple vessel disease before 1 year
- He got graft site complications
- No history of food and drugs allergy.

## Past surgical history:

■ Patient hospitalized and under went CABG ( CORONARY ARTERY BYPASS GRAFTING) in April 2024 and underwent ICU CARE treatment for 10 days

## Family history:

- Having history of Hypertension, Diabetes and cardio vascular diseases in family for past 2 generations.

## Personal history:

- Smoking :- patient is chronic smoker since his 18 years of age
- Alcohol : -patient is occasional drinker
- Food habit :- patient is having mixed meal pattern
- Bowel and bladder :- Regular bowel and bladder habit
- Sleeping Pattern :- having regular 8-10 hours of sleep during both day time and night time.

# PHYSICAL EXAMINATION

## General Inspection:

Gait : Uncoordinated

Body Build : General

Consciousness : Conscious and alert

Weight : 70kgs

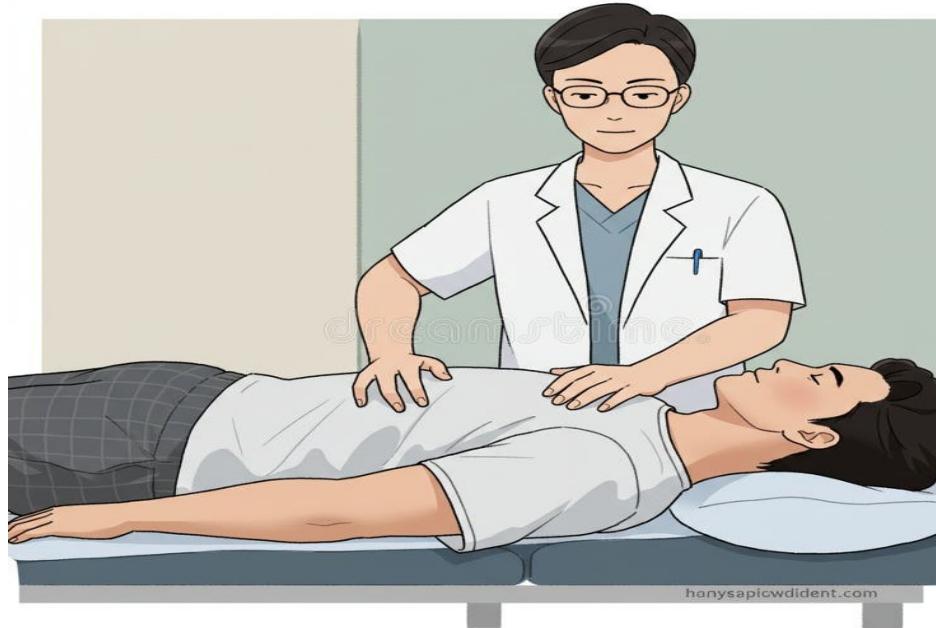
## Physical signs

Temperature : 98f

Pulse : 88b/minute

Respiration : 20 /minute, regular

Blood Pressure : 150/90 mm Hg in both arms (supine)



## General examination

- Pallor Absent
- Icterus absent
- Lymph node not palpable
- Clubbing, cyanosis absent
- Edema present at graft site on left leg
- Dehydration absent.
- Skin normal

# **Physical examination**

Examination of head ,face and neck

## **1. Head**

Hair colors and texture normal, clean hair no any injury

## **2. Eyes**

Partial vison loss in right eye, watering of the eyes and no redness of the eye lid

## **3. Ears**

No discharge but difficulty in hearing

#### **4. Nose**

No discharge , bleeding and smelling problem.

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#### **5.Mouth**

Missing teeth and dental carries

#### **6. Neck**

No enlarged lymph node and thyroid gland,normal neck mobility is present

#### **7. Extremities**

Edema present in lower limb of left leg ( graft site), redness around the area and slight pain

## SYSTEMIC EXAMINATION

### Respiratory examination

- Inspection- normal
- Palpation- Non tender
- Percussion- Resonant in all side of the chest.
- Auscultation- Normal breath sound in both site (22 breaths/min)

### Cardiovascular system

- Inspection: long surgical scar present in the middle of chest
- Palpation: Non tenderness,
- Auscultation: regular heart beat 88beats/ min.

## **Abdominal examination:**

**Inspection-** no distension ,moving symmetrically with respiration, no dilated superficial veins, no scar marks

**Palpation-** tenderness present in the epigastric region

liver- no engarlgement

**Percussion-** Dullness present

**Auscultation-**Bowel sounds present (normal)

## CNS examination

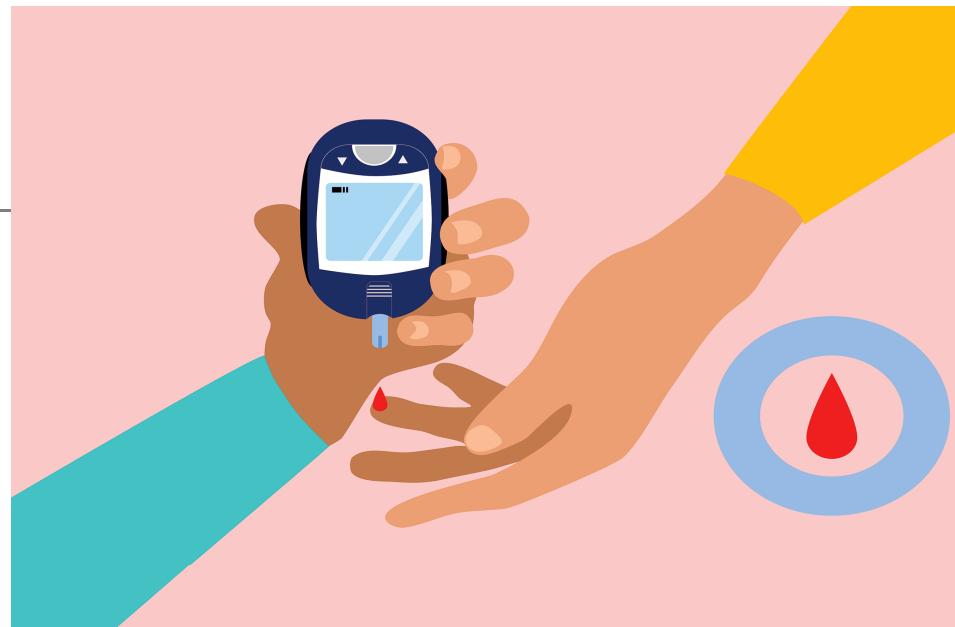
- Mental function is adequate
- Motor examination eg position of limbs normal ,no atrophy, uncoordinated gait
  - No abnormal movement.
  - Sensory normal
- Numbess and tingling sensations in the both foot

# Investigations ( 10/09/2025)

## Hematological

- RBS-180mg/dl
- Sodium-141mg/dl
- Potassium-4.5mmol/dl
- Createnine-1.2mg/dl
- Blood urea-35mg/dl/gm

CBP: Normal findings



# Urine analysis

- Color-light yellow
- Reaction-Acidic
- Albumin- traces
- Sugar-3+
- Transparency -Clear
- Pus cells-5-6/HPF
- Epithelial cells-4-5/HPF



Blood Sugar levels:

FBS:220 mg/dl

RBS:180mg/dl

PPBS:170mg/dl



# Complications

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- **Sensory complications:** Developed blurred vision in right eye since 3 years.
- **Cardio vascular complications:** Having Acute MI in 2013 and underwent Angiogram, 2D Echo and ECG under medical management. And placed on Tab: Ecosprin 75mg and Tab: Atorvostatin 40mg.
- Triple vessel disease and under went CABG in April 2024.
- **Neurological complications:** having **peripheral neuropathy** symptoms like **foot numbness and tingling sensation**

# Treatment

## Initial treatment:

- During initial diagnosis of condition, patient is placed on
  - Tab.Amlodipine5mg OD for 1year (HTN)
  - Tab.Telma H 40mg (HTN) since then
  - Tab.Metformine + Glimipride= 500mg+1mg BD for 4 years (DM)
  - Tab.Gabbapentine – 300mg OD (nervous weakness)
- Later on Insulin is added into course of treatment
  - Insulin Mixtord BD dose 40IU.....30IU initially, 30IU.....20IU later on

➤ After CABG the treatment course is

- metformin 1000mg + glimiperide 2mg+voglibuse 0.3mg
- ~~Insulin Mixtord 35IU.....25IU~~
  - Tab: Ecosprin 150mg OD
  - Tab: Clopodoxel 150 mg OD
  - Tab: Atorvostastin 40mg OD
  - Tab: Pragabalin 50mg + Gabapentin 300mg OD
  - Tab A-Z ( multivitamin + Antioxidant)
  - Tab: Pantaprozole 40mg ( proton pump inhibitor) for gastric irritation



# Recommendations ( Informal Health Teaching)

1. Diabetic Diet plan with strict salt restriction to control Hypertension.
2. Foot care – using MCR chappals and frequent foot massag
3. Exercises- brisk walking ( concern about the age of patient)
4. Adequate fluid intake (3-4lt daily)
5. Choosing different sites for insulin injection to avoid pain and tissue damage



"It all starts in the mind. Just keep reminding yourself that you can beat this"

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