

Metadata

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Title

A Case of Acute Myocardial Infarction in a Patient with Longstanding Type 2 Diabetes Mellitus

Abstract

We present the case of a 54-year-old male with type 2 diabetes mellitus who developed an anterior wall myocardial infarction. The report discusses risk factors, presentation, acute management, and secondary prevention strategies, highlighting the importance of early recognition and dual antiplatelet therapy.

Main Content

Case Presentation

A 54-year-old male with a 15-year history of type 2 diabetes and hypertension presented with acute-onset central chest pain radiating to the left arm, associated with diaphoresis. The symptoms began 2 hours prior to arrival.

Examination and Investigations

- Blood pressure: 146/90 mmHg
- Heart rate: 102/min
- ECG: ST-segment elevation in leads V2–V6
- Troponin-I: Elevated (14 ng/mL; ref <0.04)
- HbA1c: 9.1%

Diagnosis

Acute ST-elevation myocardial infarction (STEMI), anterior wall.

Management

- Aspirin 325 mg loading dose
- Ticagrelor 180 mg loading dose
- Intravenous heparin infusion

- Emergency percutaneous coronary intervention (PCI): Drug-eluting stent to proximal LAD
- Initiated on beta-blocker, statin, ACE inhibitor, and continued dual antiplatelet therapy

Follow-up

At 6-month review, patient reported improved functional status with no recurrence of symptoms. Glycemic control improved with intensified insulin regimen.

References

1. Patel A, Kumar R. Management of STEMI in diabetic patients: A review. *J Cardiol Clin* 2024;32(3):211-218.
2. Singh H, Mehta S. Advances in dual antiplatelet therapy post-PCI. *Int J Cardiol Res* 2023;17(1):45-52.