

Case studies: Differentials diagnosis of raised troponin level in emergency setting

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ABSTRACT

Introduction: This case report highlights the potential for misdiagnosis of acute medical conditions, particularly in emergency settings, where reliance on common biomarkers like troponin T may overshadow other underlying causes. Despite troponin T being a sensitive indicator of cardiac injury, its elevation can sometimes lead to overlooking alternative diagnoses. **Case Studies:** Mr. M, a 36-year-old active smoker with a history of epilepsy, presented with worsening central chest pain and reduced effort tolerance for the past 5 days. Apart from that, he had suffered from a right ankle fracture three weeks ago which renders him partial immobilized. Troponin levels were elevated at 450 ng/L, prompting a diagnosis of NSTEMI and ACS treatments are commenced. However, subsequent desaturation led to suspicion of acute pulmonary embolism (PE). Confirmatory imaging via CTPA revealed extensive PE, necessitating thrombectomy. Further evaluation for antiphospholipid syndrome was initiated. **Discussion:** This case underscores the importance of a thorough history-taking and clinical suspicion, especially in acute settings. Despite the commonality of certain diagnoses, such as myocardial infarction in the presence of elevated troponin, overlooking alternative conditions like PE can lead to delays in appropriate treatment and potential harm to the patient. Healthcare providers must remain vigilant and consider a broad differential diagnosis to ensure optimal patient care and outcomes.