


## Case report: aneurysm of the left anterior descending artery – sometimes the skill lies in understanding when to stop

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**Introduction:** Coronary artery aneurysm (CAA) is a rare condition that occurs in 0.3%–4.9% (mean incidence of 1.65%) of patients undergoing coronary angiography and is characterized as dilatation of the coronary artery exceeding 50% of the reference vessel diameter<sup>1,2</sup>. The left anterior descending artery is affected in 32.3% of all CAAs.<sup>2</sup>

**Case report:** 46-year-old patient was admitted to the cardiology department due to chest pain. Previously, the patient had no comorbidities; he was non-smoker but with a positive family history of cardiovascular diseases. Upon arrival at the emergency department, the blood pressure was elevated (190/110 mmHg). The clinical status was unremarkable. The 12-channel electrocardiogram (ECG) showed a sinus rhythm of 70 beats per minute with the ST segment depression up to 2 mm in the anterolateral leads. Immediately upon arrival, acetylsalicylic acid was prescribed. A serial control of high-sensitive troponin (HsT)

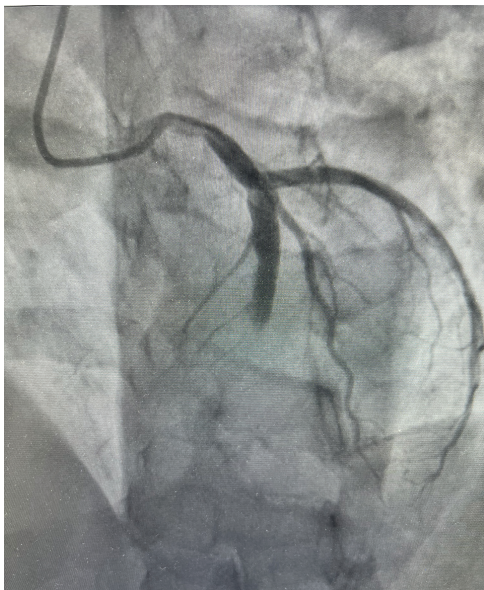
showed a rise of HsT from 5.98 ng/l to 75 ng/l, with a maximum of 2265 ng/l. After a significant increase in troponin and with regard to ongoing chest pain and ischemic changes in ECG, the patient was admitted to the coronary care unit (CCU) under the diagnosis of acute coronary syndrome - non-ST elevation myocardial infarction. Upon arrival in the CCU, an urgent coronary angiography was performed, which showed intact left main coronary artery, left circumflex artery, and right coronary artery. The left anterior descending artery was strongly aneurysmatic changed in the entire middle segment (beginning at a strong diagonal branch) with TIMI I-II flow (Figures 1 and 2). Echocardiography showed mild hypokinesia of the apical part of the anterolateral wall, with the left ventricle ejection fraction of 50%. Due to the findings, percutaneous coronary intervention was ceased, and conservative treatment of acute coronary syndrome was initiated. The patient was urgently referred to a tertiary center for cardiosurgical revascularization of the myocardium.

**Conclusion:** In order to provide the best possible outcome for the patient, our aim was to highlight the importance of a

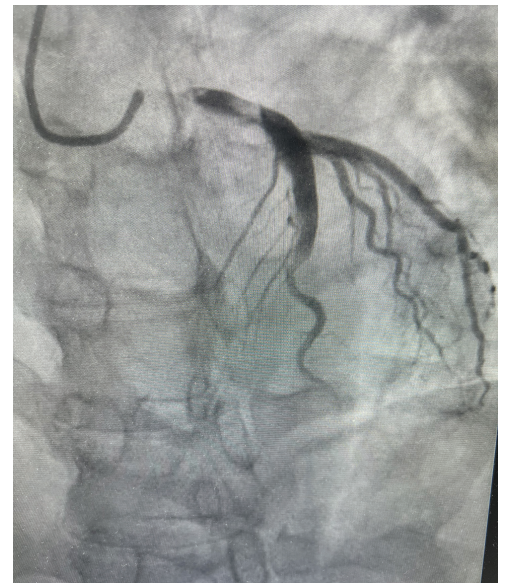
multidisciplinary approach with the cardiac surgeons and the criticality of determining when to cease percutaneous coronary intervention.

### LITERATURE

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**FIGURE 1.** The figure shows aneurysm of the left anterior descending artery in early contrast phase.



**FIGURE 2.** The figure shows aneurysm of the left anterior descending artery in late contrast phase.

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