1066 **Successful Intravascular Lithotripsy for a Circumferentially Calcified Left Anterior Decending Artery Lesion in Non-ST-elevation Myocardial Infarction**

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A 73-year-old woman with hypertension, hyperlipidemia, and type 2 diabetes had previously undergone percutaneous coronary intervention (PCI) at the age of 59 for angina pectoris, during which stents were implanted in all three coronary vessels. Her most recent coronary angiographic follow-up was in March 2024. In March 2025, she presented to our emergency department with persistent chest pain. Electrocardiography showed ST depression in leads V2?V6, and serum troponin T was positive. These findings led to a diagnosis of non-ST-elevation myocardial infarction (NSTEMI). Urgent coronary angiography revealed 90% stenosis in segment #7 of the left anterior descending artery (LAD). Optical frequency domain imaging (OFDI) demonstrated severe circumferential calcification at the culprit lesion. PCI was performed using Intravascular lithotripsy (IVL) with a 2.5×12 mm balloon, which successfully fractured the calcified plaque and achieved favorable lesion modification. A XIENCE Skypoint 2.75×23mm stent was deployed successfully without complications. This case highlights the effective use of IVL in treating a heavily calcified LAD lesion in the setting of NSTEMI. We present this case with a review of the relevant literature.