

A Deadly Complication of Vasospastic Angina- Case Report

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BACKGROUND

- Vasospastic Angina (VSA) is chest pain caused by coronary artery spasms.
- Typically managed with calcium channel blockers (CCB) and nitrates
- Rarely causes ischemia, life-threatening arrhythmias or sudden cardiac death (SCD)

CASE PRESENTATION

- 52 YO M with history of STEMI diagnosed as VSA presented with crushing chest pain (CP).
- EKG- inferior/posterior ST elevations.
- Left heart catheterization- 99-100% stenosis of proximal to distal dominant left circumflex involving the second obtuse marginal branch
- Diagnosed with VSA as no significant atherosclerotic disease noted
- Intracoronary nitroglycerin precipitated V-fib arrest with ROSC
- TTE- hypokinesia of basal to mid lateral wall
- Recurrent CP treated with nitrates during hospitalization
- ICD placed for secondary prevention
- Discharged on amlodipine, isosorbide mononitrate, and diltiazem

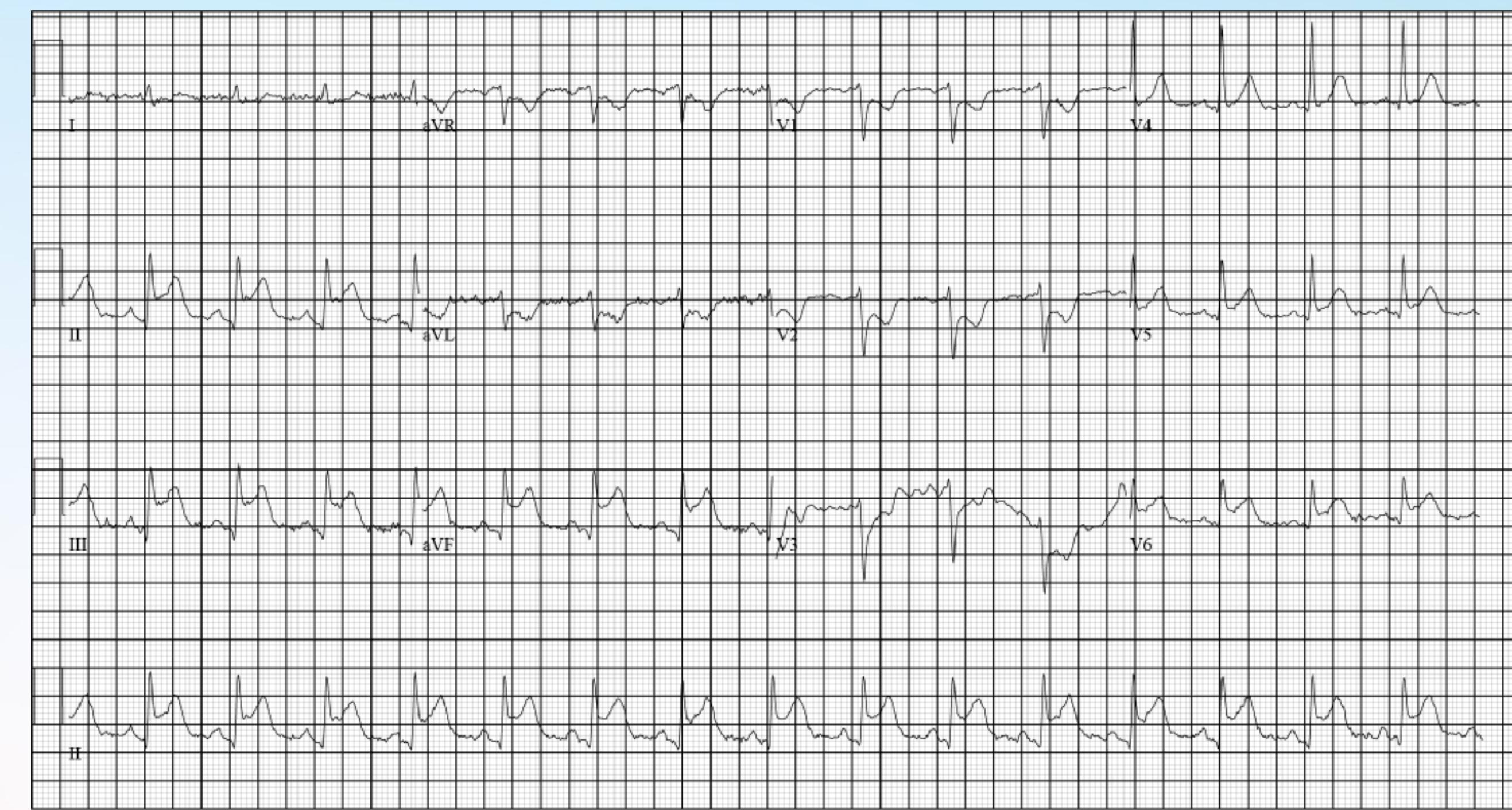
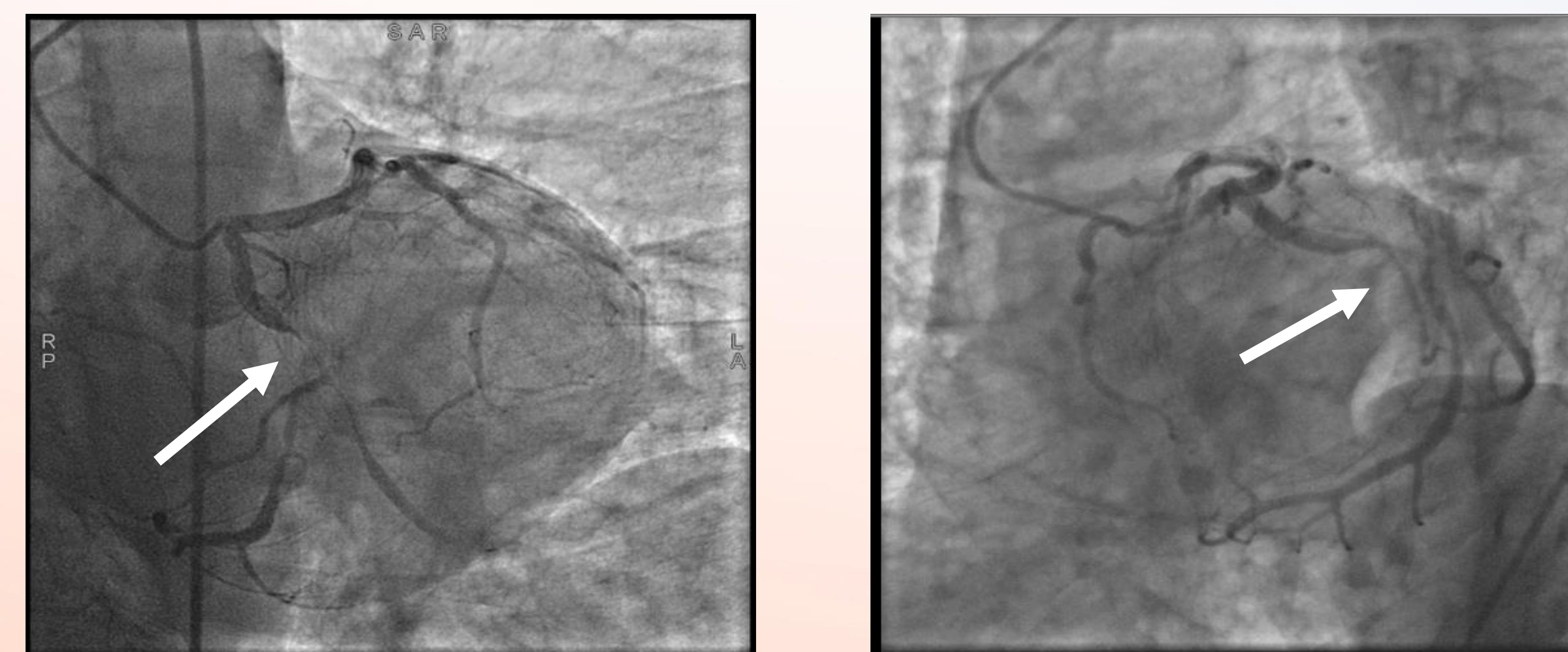


Figure 1: 12 lead EKG showing ST elevations in the inferior/ posterolateral territory.



Figures 2/3: Left Heart Catheterization image showing 99% stenosis of proximal to mid circumflex lesion.

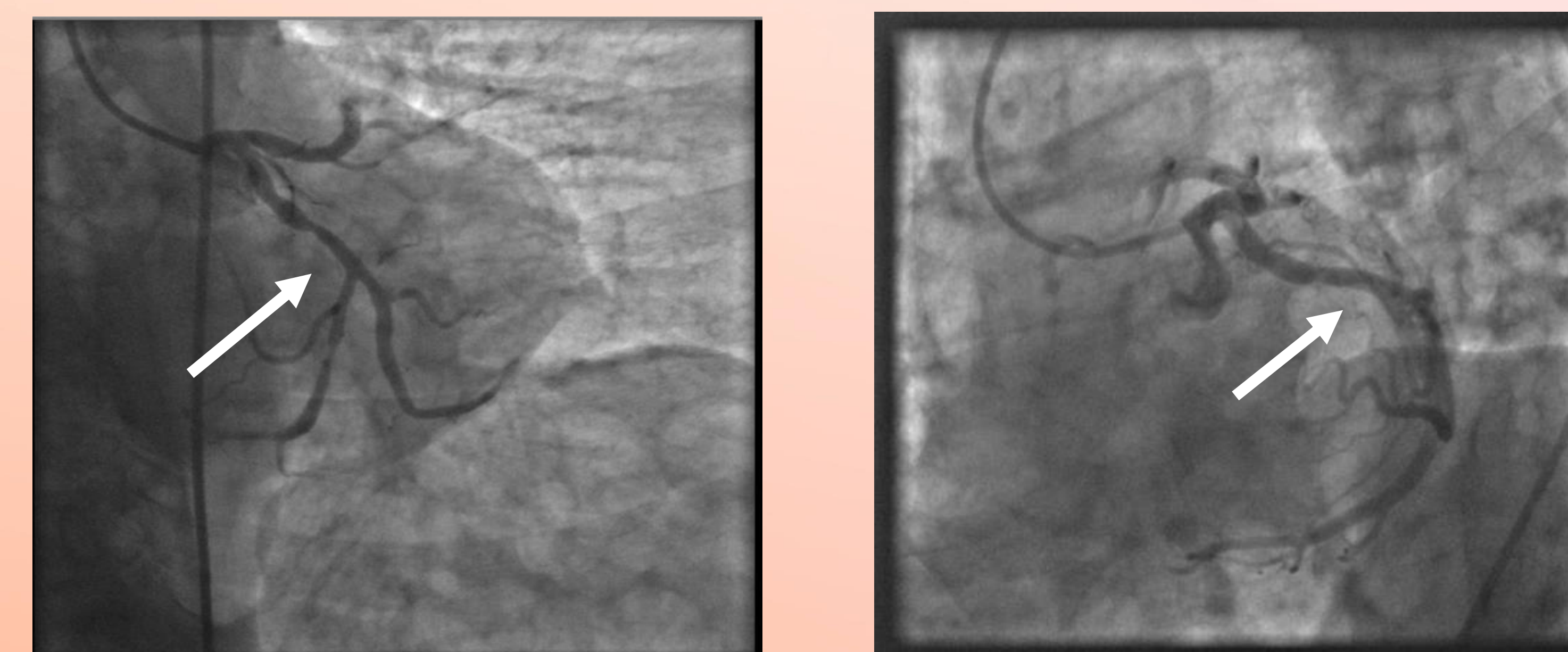


Figure 4/5: Left Heart Catheterization image showing complete resolution of spasm of circumflex artery post nicardipine infusion.

DISCUSSION

- 10-20% of VSA patients have infarctions leading to fatal arrhythmias and SCD
- Proposed to be from significant ischemia or reperfusion injury after spasm relieved
- Management includes:
 - CCBs or nitrates
 - lifestyle changes
- 5-30% have recurrent symptoms despite medications
- Refractory management includes:
 - Coronary stenting
- Endoscopic thoracic sympathectomy and sympathetic denervation of renal vasculature are possible treatments
- V-fib cardiac arrest has indication for ICD via secondary prevention

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