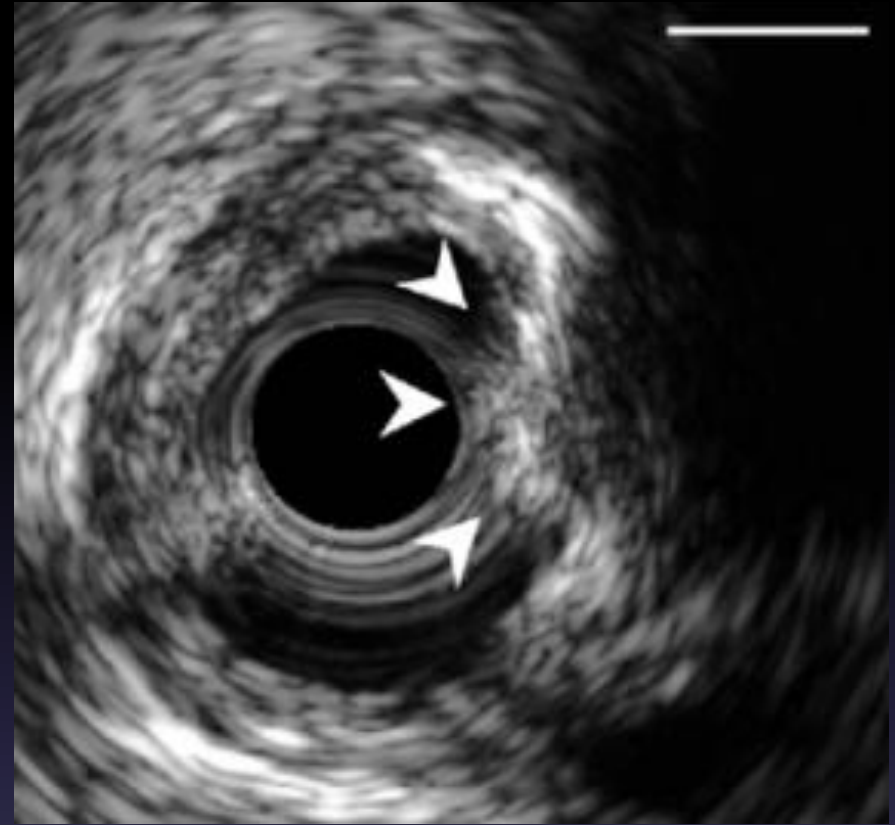
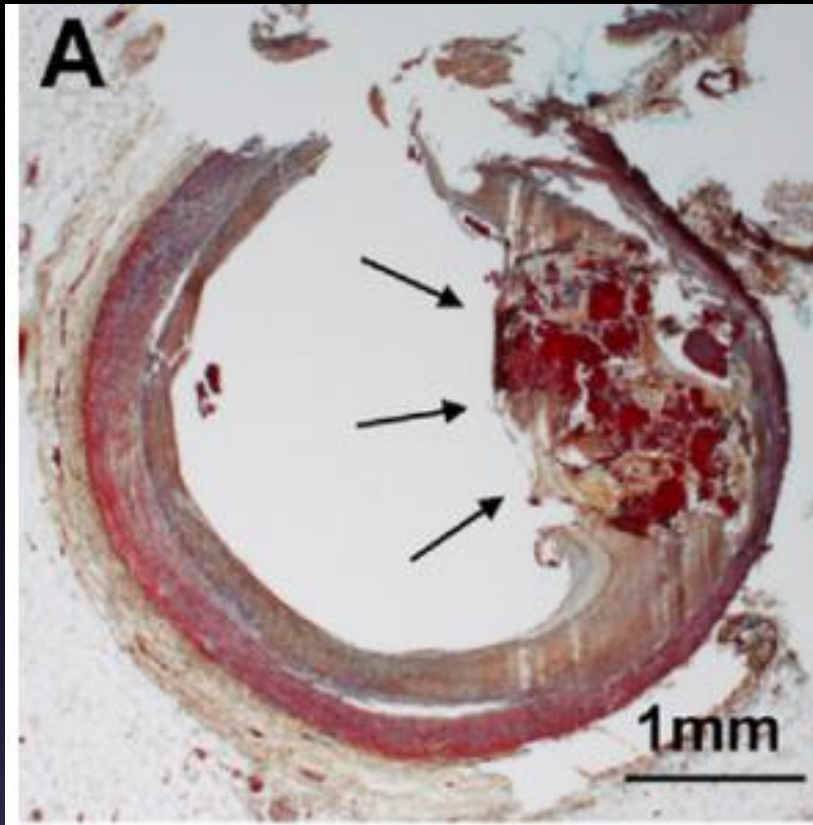


Where did the organized thrombus causing myocardial infarction come from?

Wakayama Medical University
Wakayama, Japan

Yasutsugu Shiono, Takashi Kubo, Tsuyoshi Nishiguchi
Ikuko Teraguchi, Aiko Shimokado, Keisuke Satogami
Yuichi Ozaki, Maokoto Orii, Kunihiro Shimamura
Takashi Yamano, Takashi Tanimoto, Yasushi Ino
Tomoyuki Yamaguchi, Kumiko Hirata, Toshio Imanishi
Takashi Akasaka

Calcified nodule



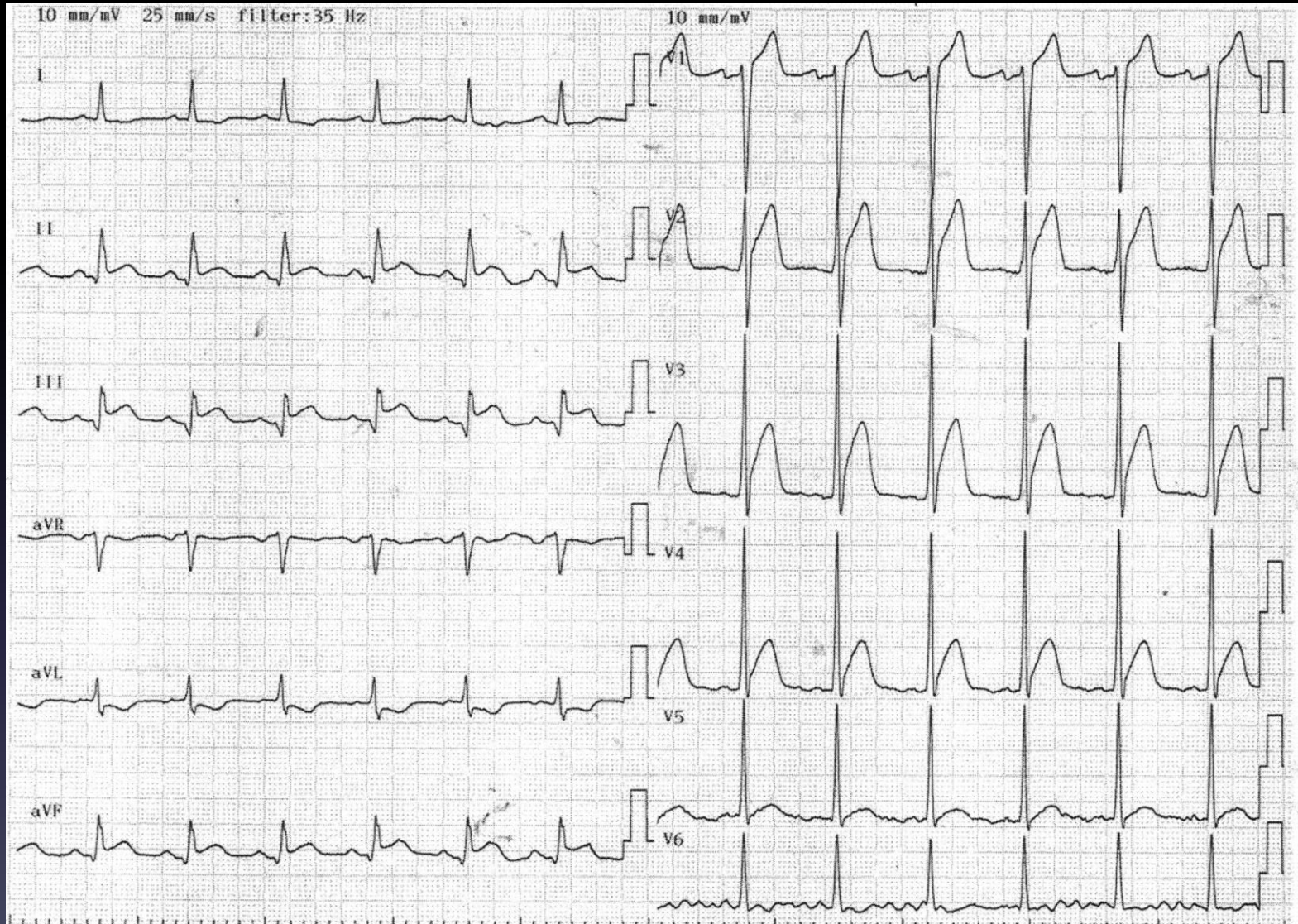
- ✓ IVUS-derived calcified nodule is characterized by intracoronary protruding calcification with convex and irregular luminal surface.
- ✓ Calcified nodule can lead to local thrombus formation and accounts for 2 to 7% of coronary events.

Case

A 58-year old man with a history of inferior myocardial infarction managed by medical treatment was admitted to our hospital because of chest pain. He had been on hemodialysis for end-stage renal disease for 33 years.

On physical examination, the blood pressure 190/90 mmHg, the pulse 85bpm, and the oxygen saturation 95% while the patient was breathing ambient air.

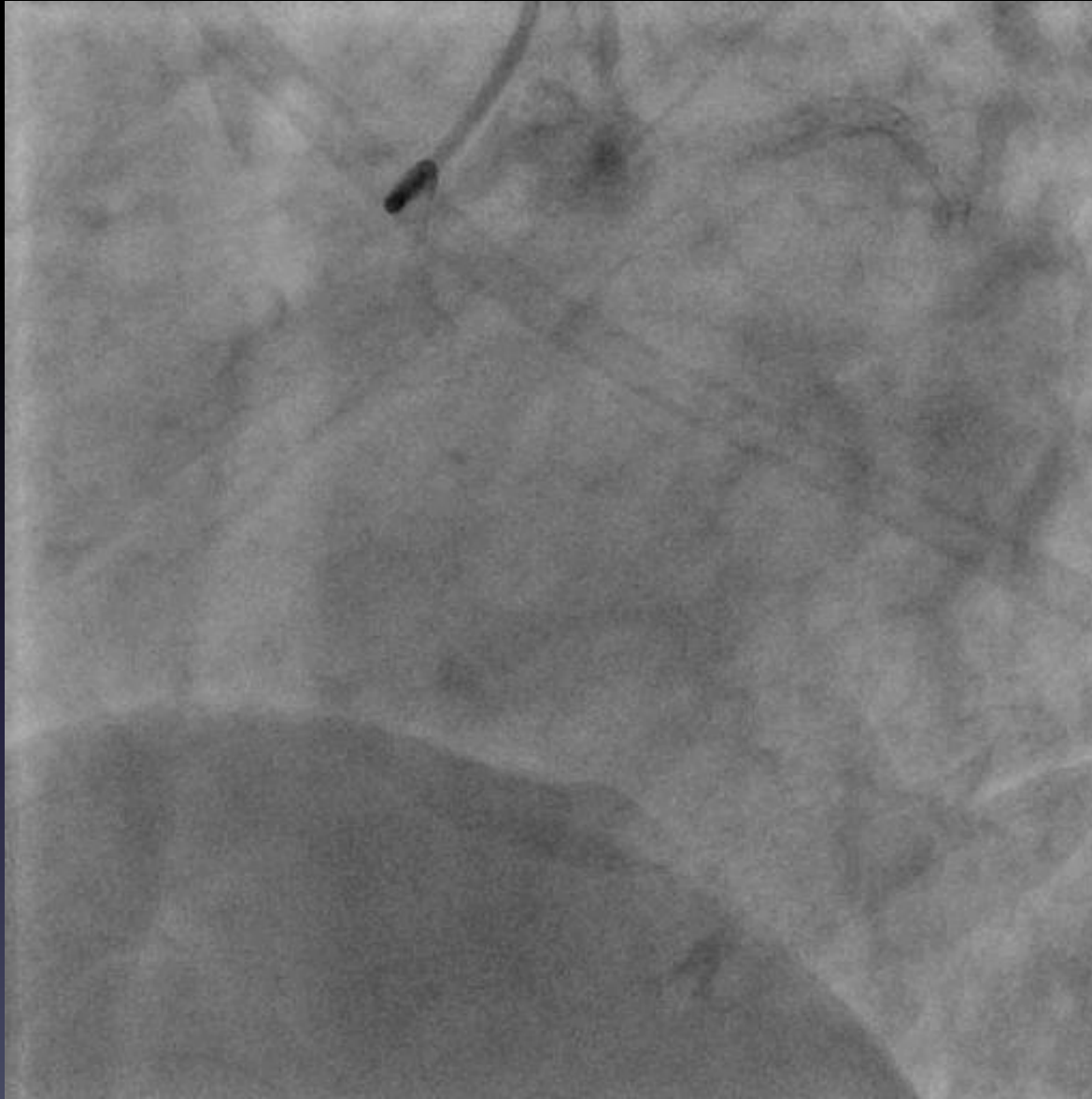
Electrocardiogram on admission



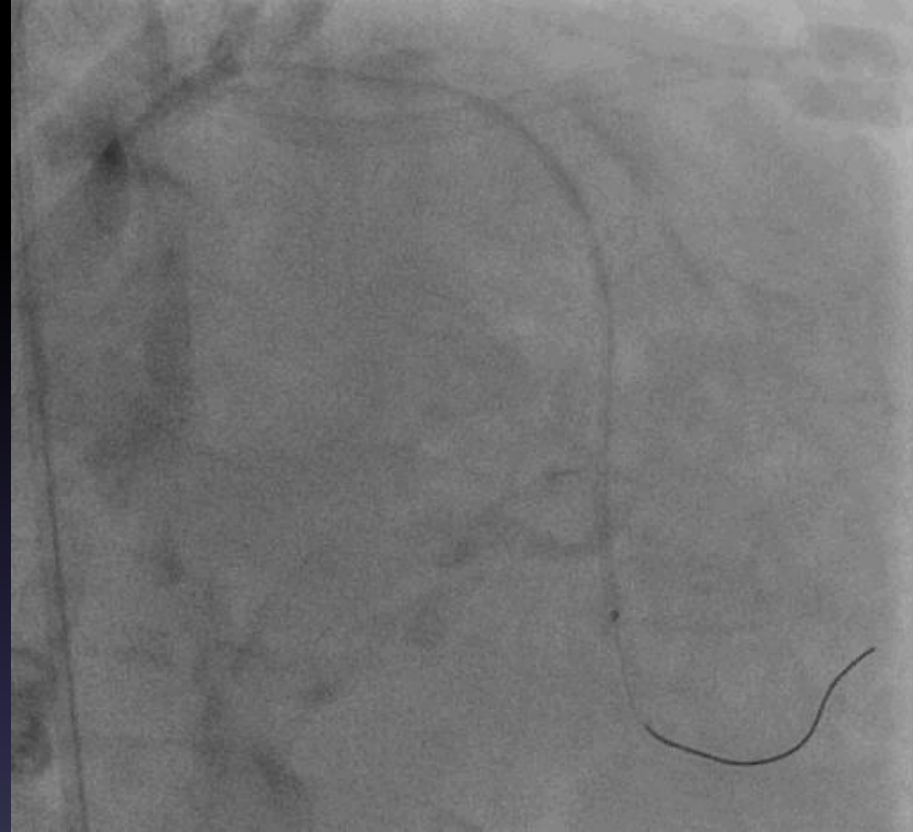
Coronary angiography: pre-intervention



Coronary angiography: pre-intervention



Manual thromboaspiration

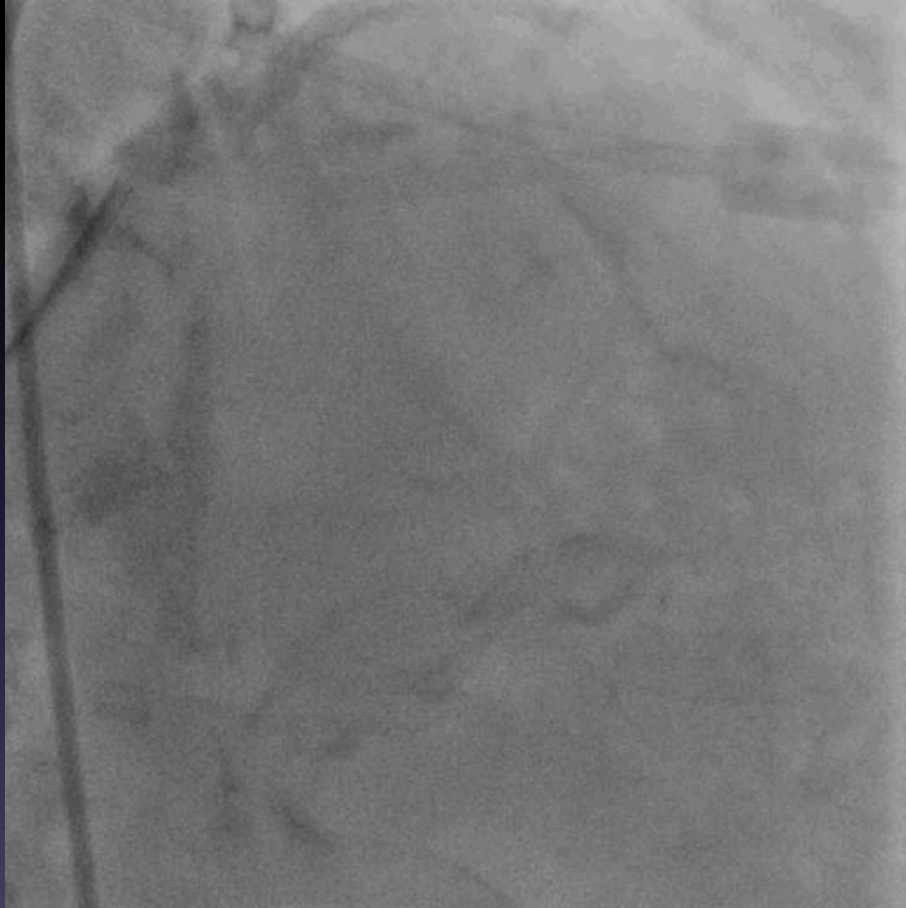


6Fr thrombuster

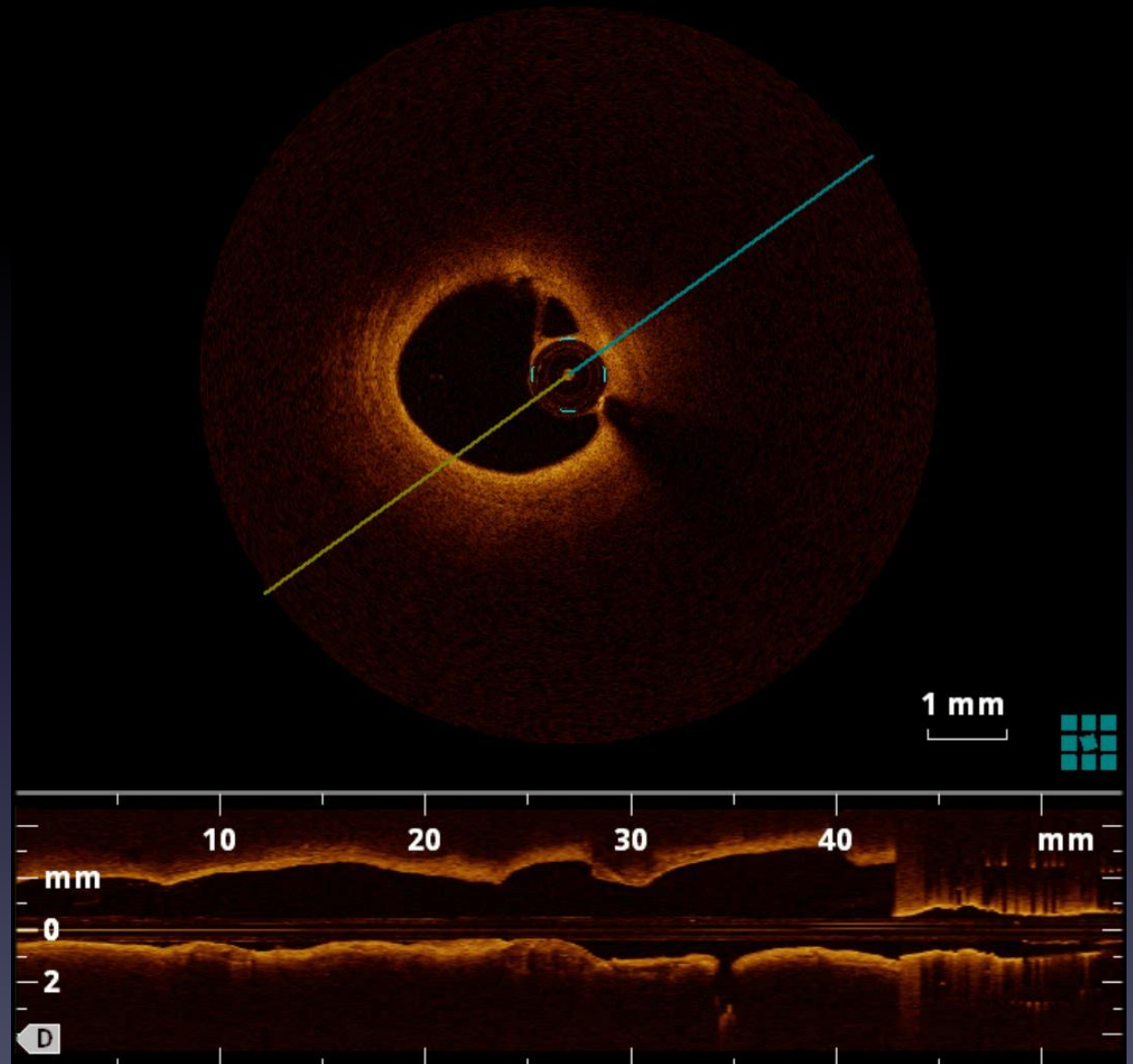
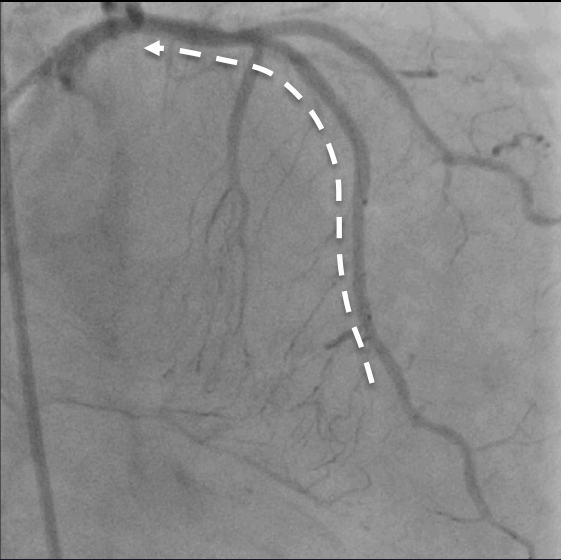
Captured organized thrombus



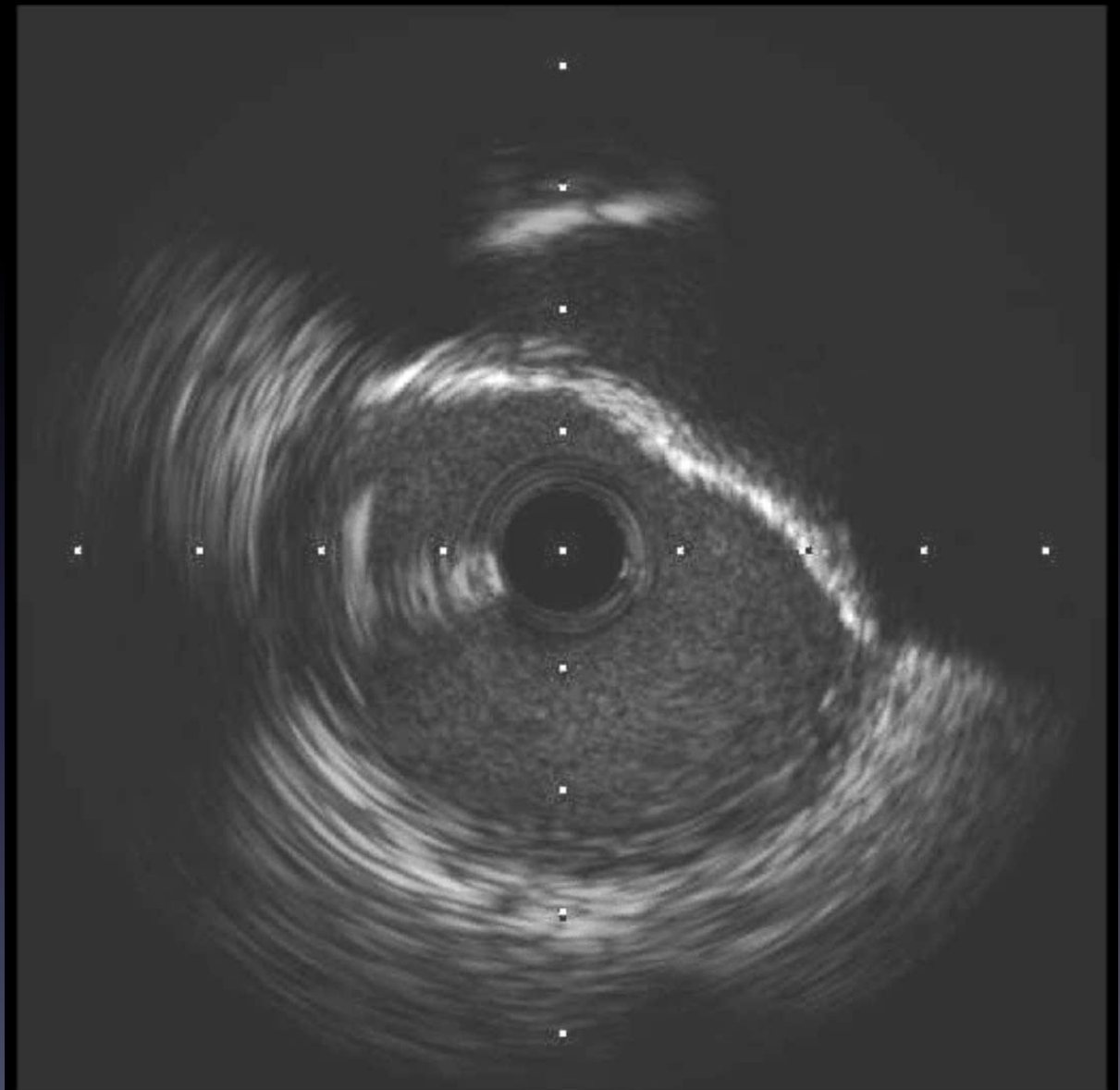
Coronary angiography post-thromboaspiration



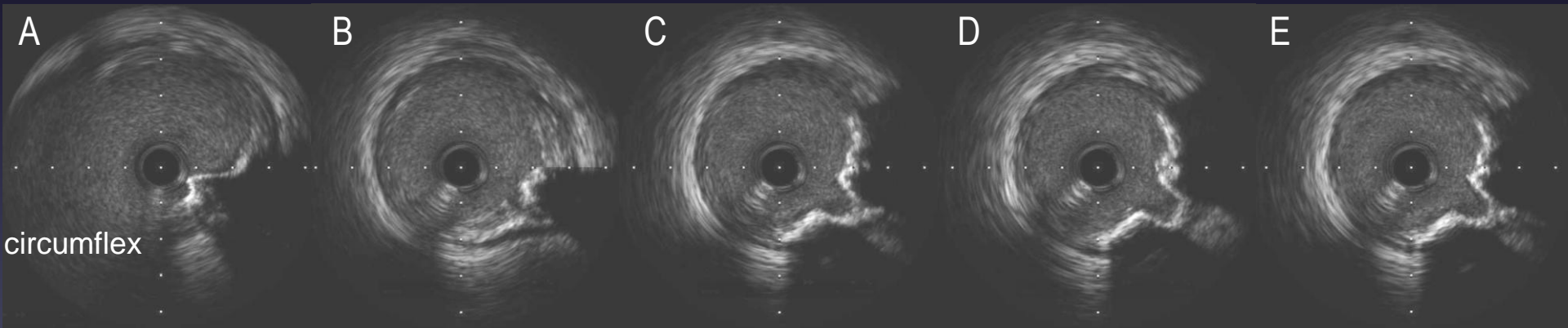
OCT: post thromboaspiration



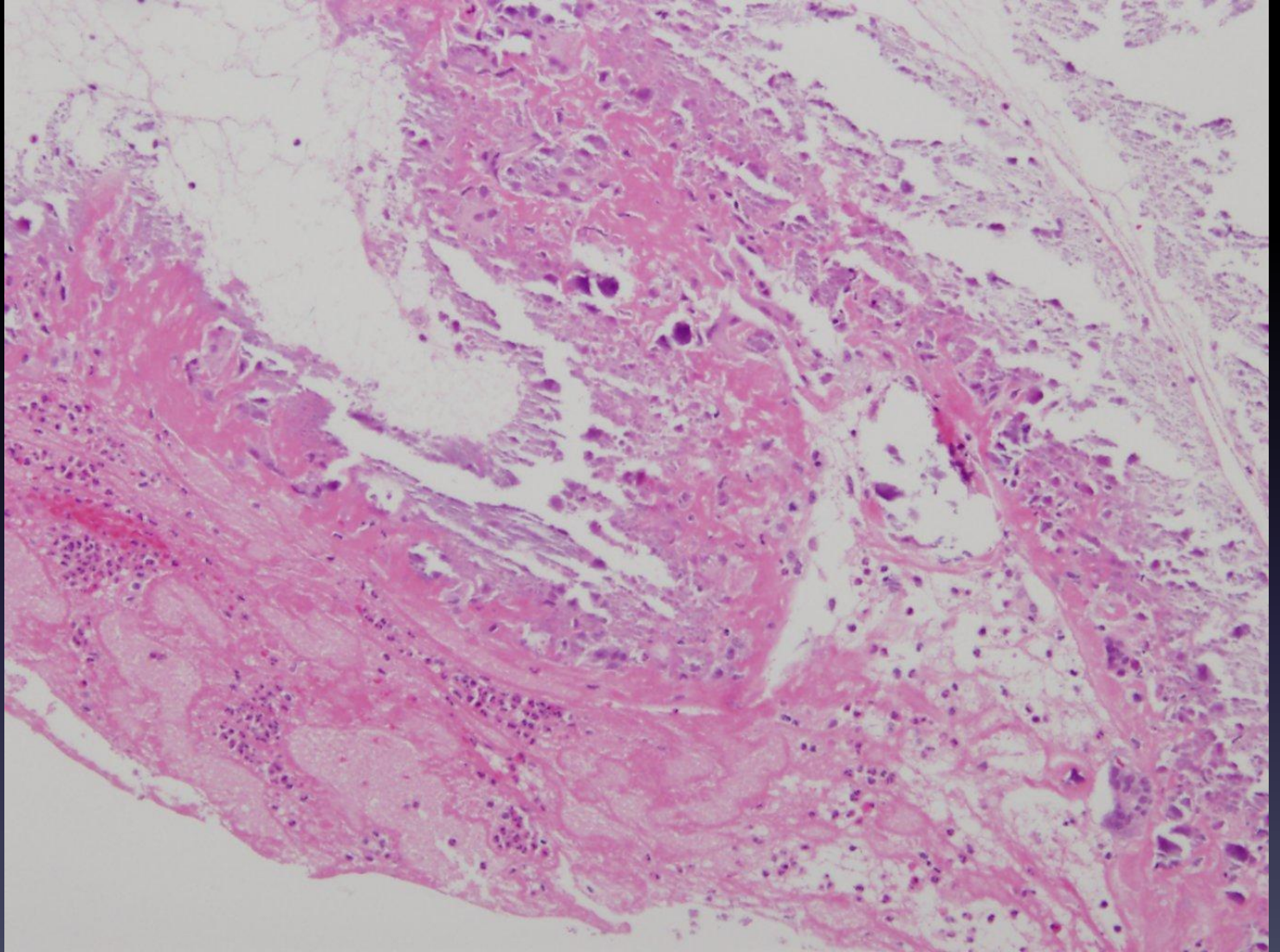
IVUS: post thromboaspiration



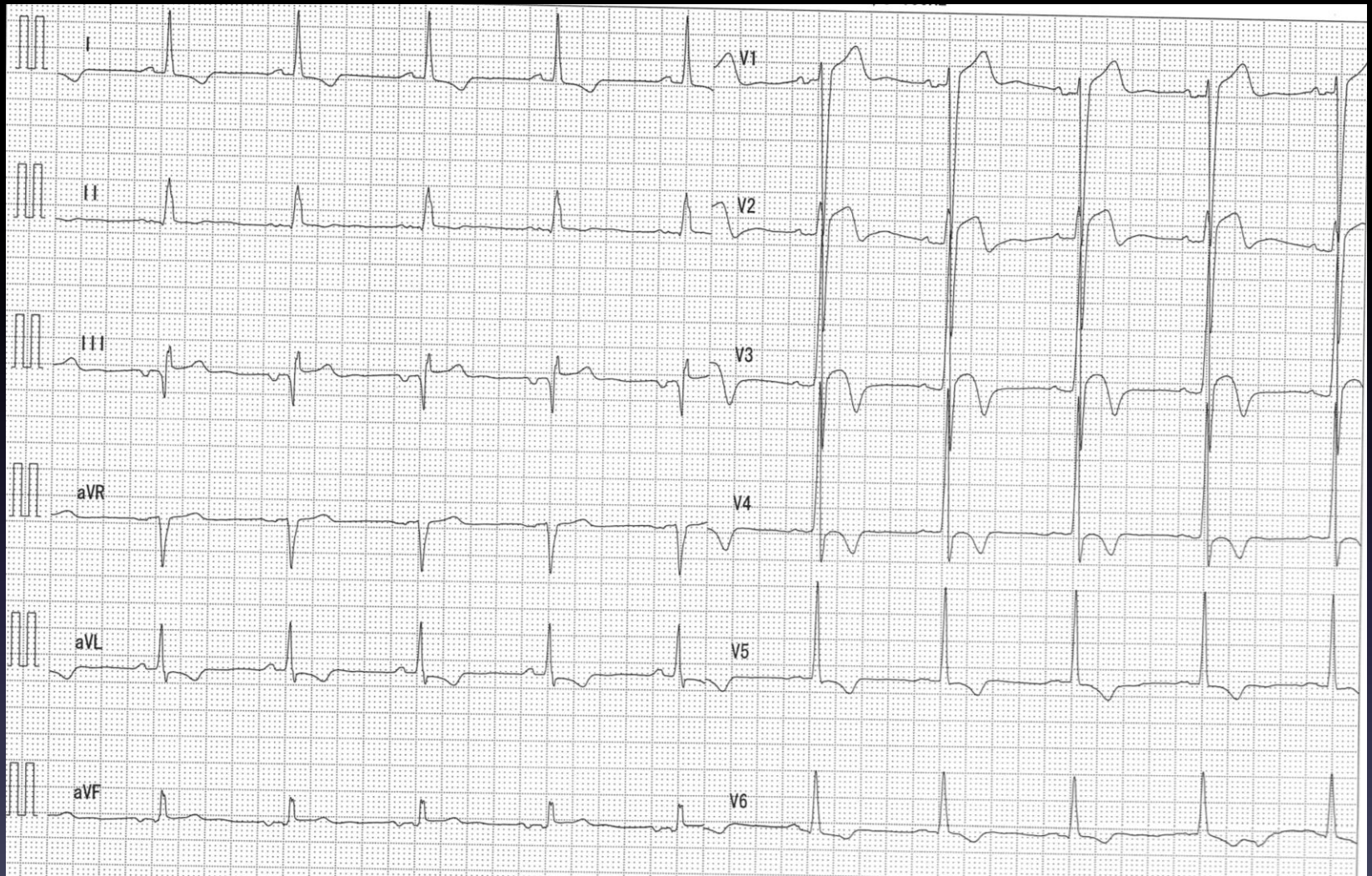
Calcified nodule detected by IVUS



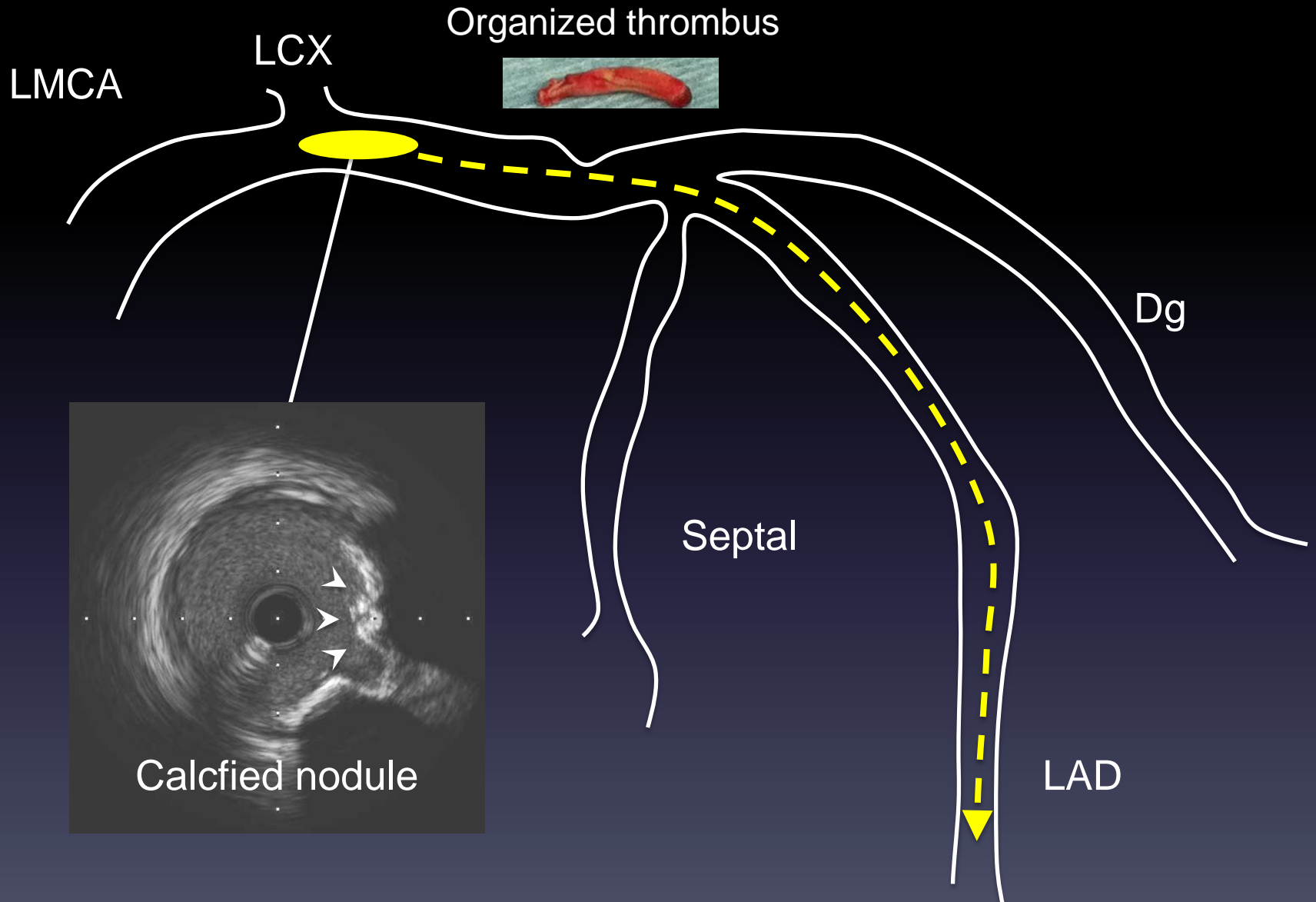
Histopathology of organized thrombus



Electrocardiography at discharge



Cause of organized thrombus



Conclusion

We had a STEMI patient, which was caused by embolization of organized thrombus.

Calcified nodule located in the proximal LAD was suspected as the origin of the organized thrombus.