









Sth IMAGING & PHYSIOLOGY SUMMIT 2012

6th CHRONIC TOTAL OCCLUSION LIVE 2012

JANUARY 6(FRI) - 7(SAT), 2012 ASAN MEDICAL CENTER, SEOUL, KOREA

Distal Migration of Thrombus during OCT Examination in patient with Normal-looking Coronary Artery

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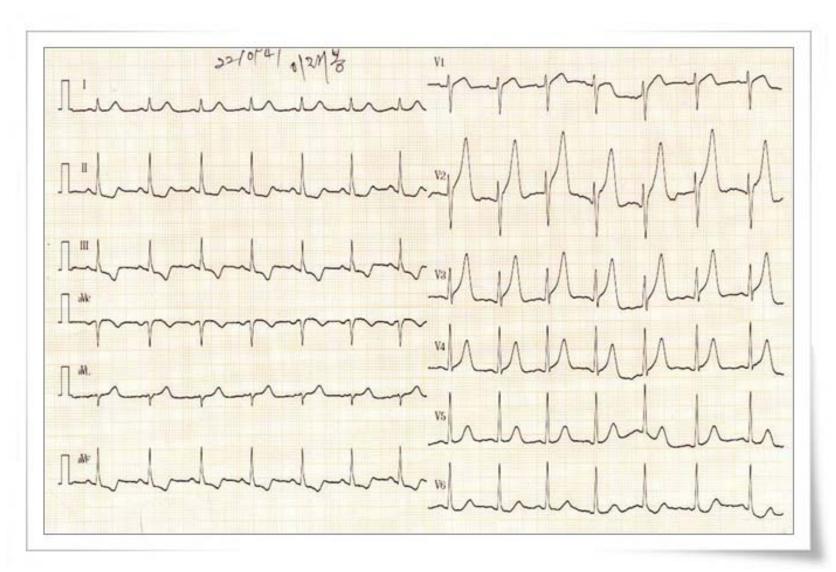
Case Summary

- Male 45YRs
- C/C; Resting onset chest pain
- P/I ; resting onset chest pain for 3 hours heavy alcoholic drinking at previous day
- * P/Hx; DM (-), HTN (-), Ex-smoker





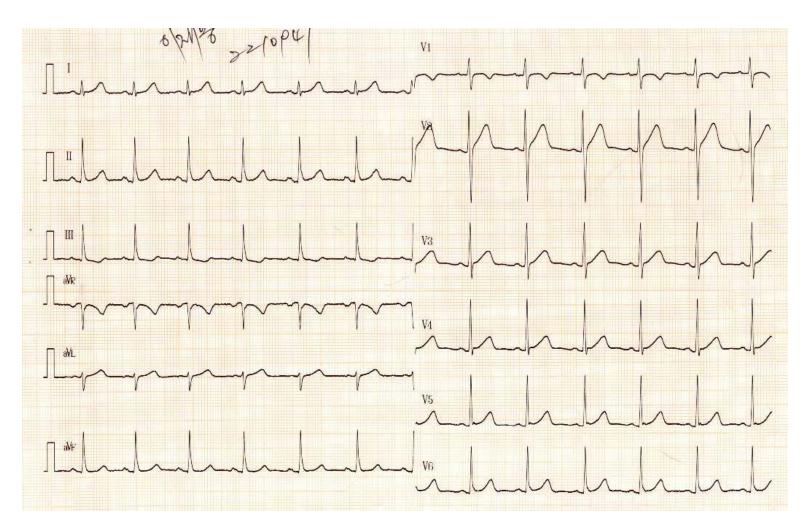
Initial ECG







FU ECG at 10 min after

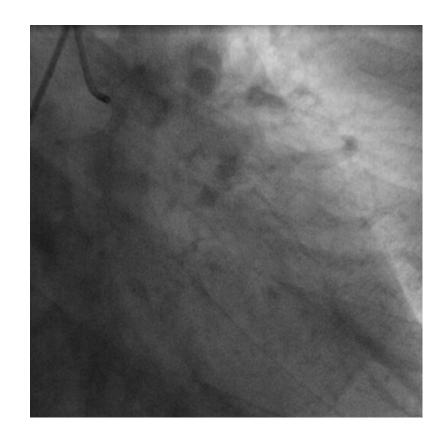






Coronary Angiogram

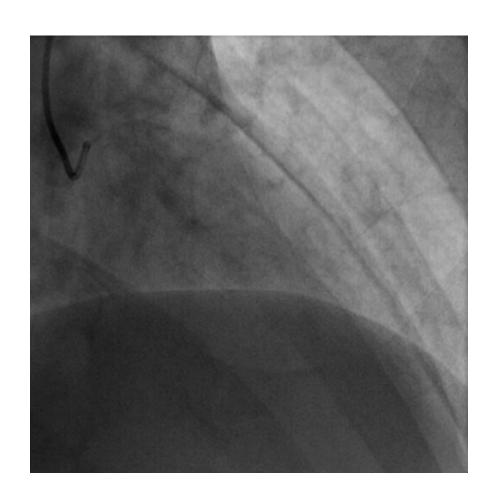








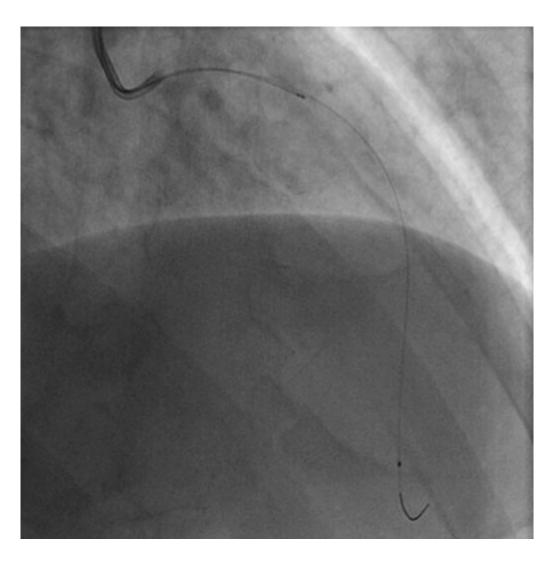
Coronary Angiogram

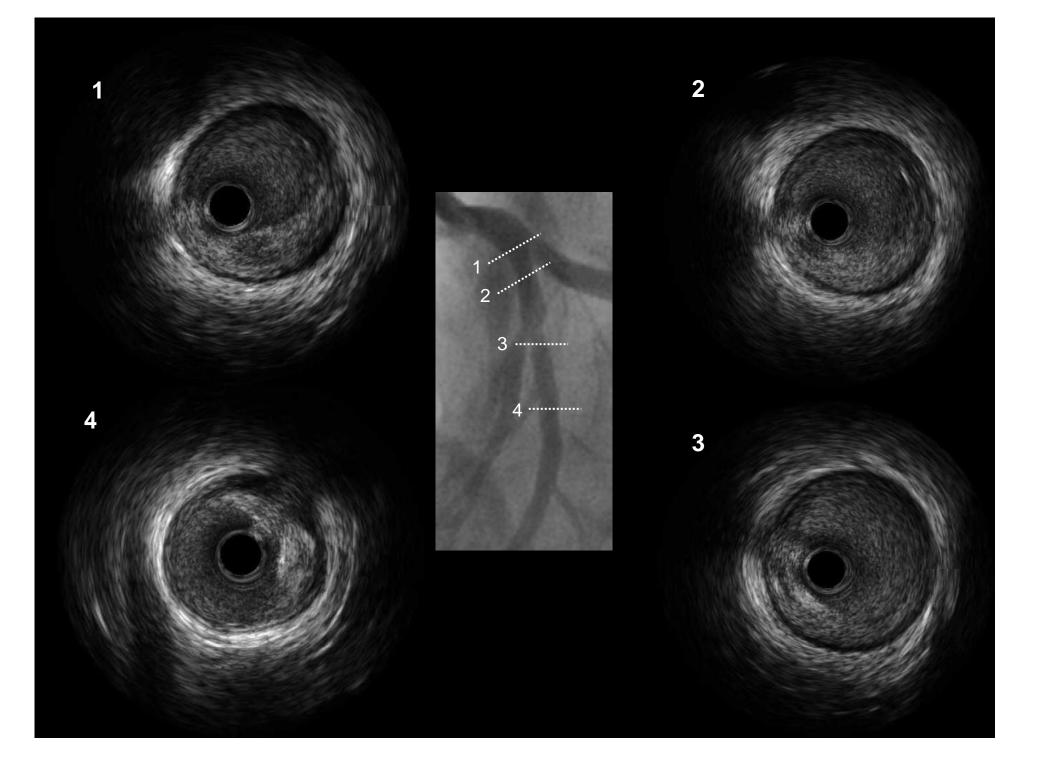






Intravascular Ultrasound





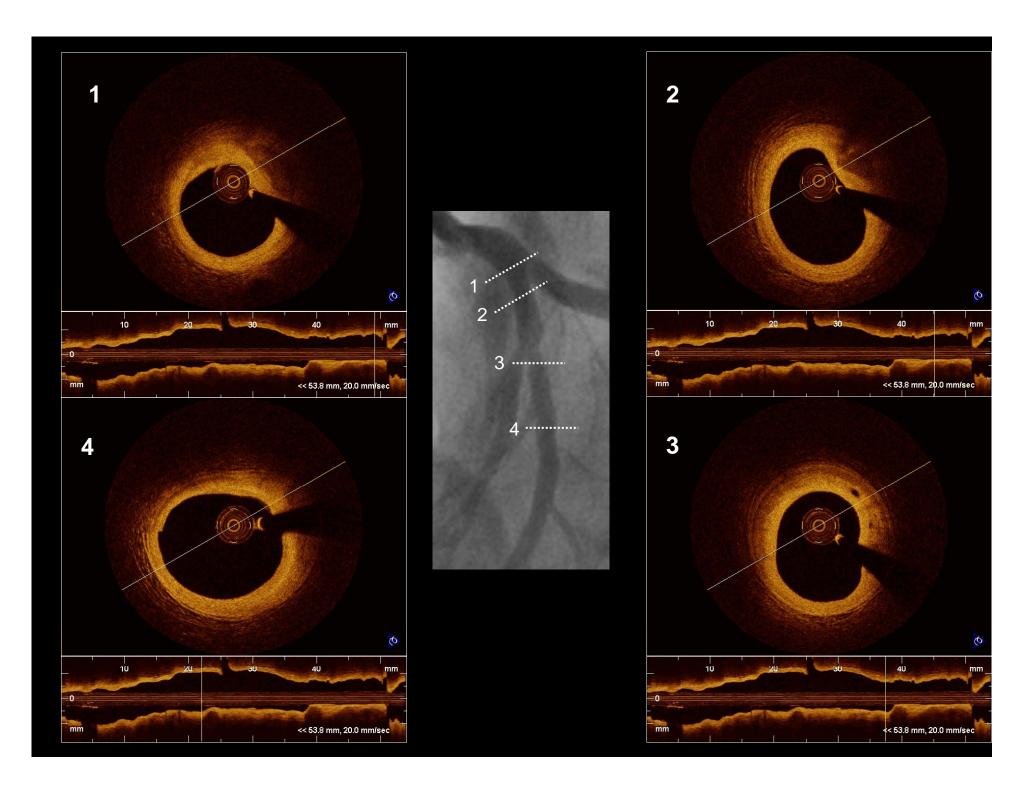




Optical Coherence Tomography

C7-XR™ OCT Intravascular Imaging System









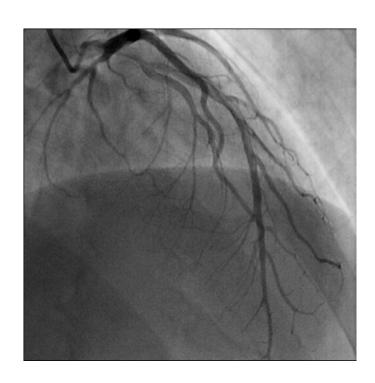
 We found vulnerable plaque and several tiny thrombus via IVUS & OCT examination in proximal LAD.

 However, this patient complained chest pain after OCT examination.

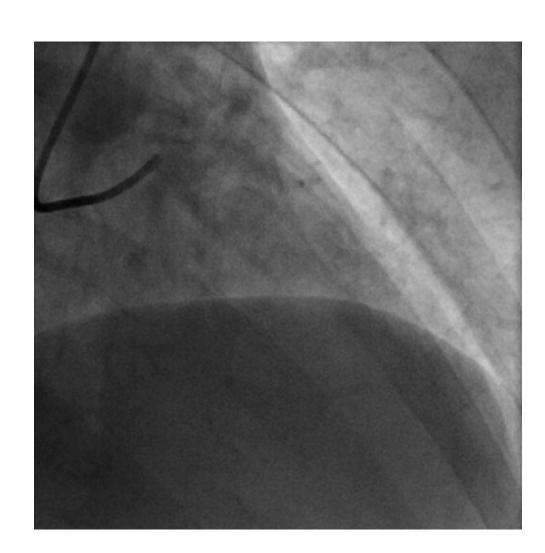




Post-OCT CAG



Pre CAG

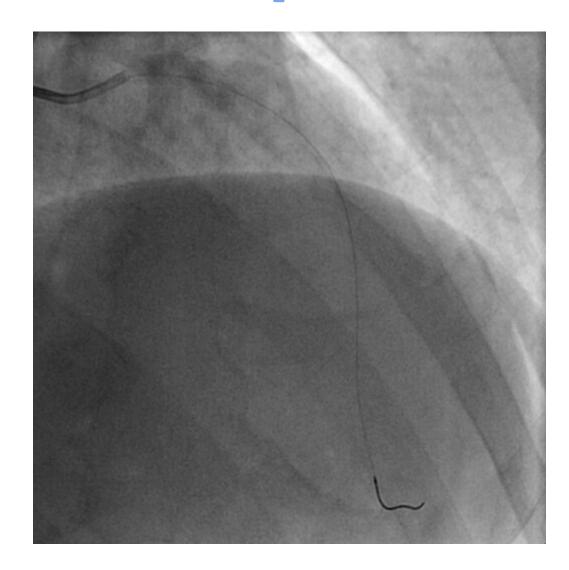






Thrombus Aspiration

Thrombuster™ 6Fr





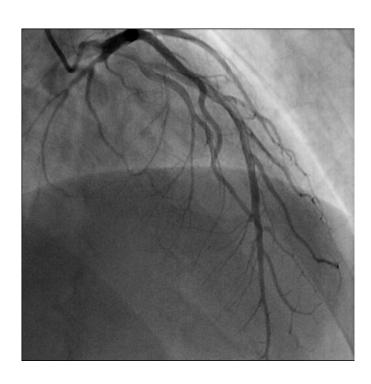


Final CAG

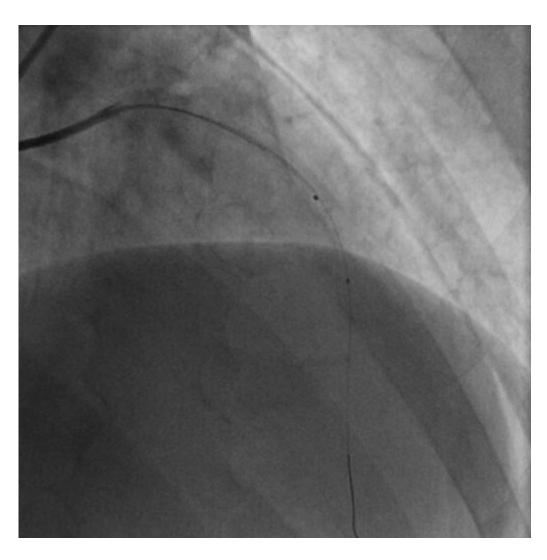




CAG during OCT examination



Pre CAG







Clinical Course

- Chest pain was resolved after thrombus aspiration and there was no significant evidence of myocardial damage.
- This patient has been clinically stable for 6months after discharge.
- Medication ; Aspirin, Clopidogrel, Atorvastatin
 Nicolandil, Benidipine





Summary

- Clinical Variant Angina, it can be subsequent result of acute coronary syndrome.
- OCT (C7) is generally safe and useful imaging modality to evaluate precise character of the coronary plaque and presence of thrombus.
- However, it can lead to distal thrombus embolization due to vigorous contrast injection during OCT examination.





Conclusion

- Unlikely IVUS, OCT needs to create a bloodfree zone for obtaining acceptable images via balloon occlusion or contrast flushing.
- Therefore, we must consider the risk of distal thrombus migration and embolization during OCT examination, especially in case of acute coronary syndrome.