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Recanalized Image of a Thrombotic Occlusion: A Lotus Root-Like Panda Face Appearance by Optical Coherence Tomography

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Abstract

In OCT, images of recanalized thrombotic occlusion have a lotus root-like appearance. This is due to septa that divide the lumen into multiple channels that communicate together and converge into a single lumen in the proximal and distal sites of the occlusion. We report a case of a recanalized mid left anterior descending (LAD) occlusion confirmed by OCT, where the lotus root appearance has a delightful panda face.

Keywords: Lotus root, Coronary artery, Optical coherence tomography

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Optical Coherence Tomography (OCT) uses polarization properties to differentiate tissue characteristics (calcified, fibrous or lipid-rich plaques) inside coronary arteries. In OCT, images of recanalized thrombotic occlusion have a lotus root-like appearance.

There is little data on this relatively new semiological entity, which has only been described in OCT.

There are no series, only case-reports [1,2]. The lotus-root like appearance is due to septa that divide the lumen into multiple channels that communicate together and converge into a single lumen in the proximal and distal sites of the occlusion. In angiography, recanalization of a thrombotic occlusion often has a "braid-like" aspect but this can be litigious, as it is not specific for recanalization.

We report a case of a recanalized mid left anterior descending (LAD) occlusion confirmed by OCT, where the lotus root appearance has a delightful panda face. A 51-year-old woman with essential hypertension, dyslipidemia and active smoking was admitted to our hospital for chest pain over the last three weeks. Her ECG was in sinus rhythm with Q waves in the anterior leads. Transthoracic echocardiography showed a kinetic apex and anterior wall and a 50% left ventricular ejection fraction. Coronary angiography (Figure 1A) revealed a recanalized thrombotic mid left anterior descending artery (LAD) occlusion confirmed by OCT (Figure 1B),

where the lotus root appearance had a delightful panda face! The occlusion was treated with a drug eluting stent with an excellent angiographic result.

It is amusing to show how serious pathology can smile as us through this adorable face.

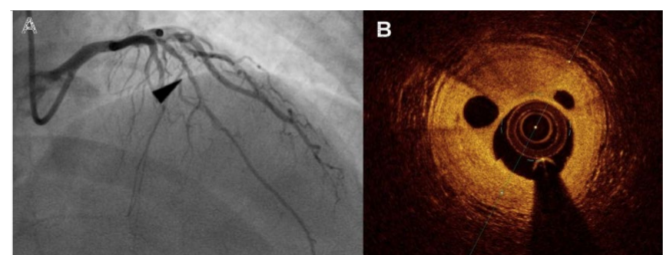


Figure 1 A) Angiogram showing the recanalized occlusion of the mid LAD (black narrow) B) OCT Axial view of the recanalized occlusion "Lotus root / Panda's Face".

References

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