

PEER-REVIEW REPORT

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Title: Excimer laser coronary atherectomy for a severe calcified coronary ostium lesion:
A case report

Reviewer's code: 03496799

Position: Peer Reviewer

Academic degree: MD, PhD

Professional title: Doctor

Reviewer's Country/Territory: Japan

Author's Country/Territory: China

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Reviewer chosen by: AI Technique

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Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

In this manuscript entitled 'Excimer laser coronary atherectomy in the treatment of a severe calcified coronary ostium lesion: A case report', the authors sought to demonstrate that excimer laser coronary atherectomy (ELCA) and small balloon dilatation is a safe and effective treatment for the management of severe calcified coronary ostium lesions. However, there are some issues the authors need to address;

1. In order to demonstrate the effectiveness of ELCA and balloon dilatation, the authors need to demonstrate plaque modification by showing IVUS images including changes in plaque morphology after ELCA and balloon dilatation before stenting. Otherwise, effectiveness of ELCA is only indirectly indicated and lacks objectivity. 2. In general, ELCA is only indicated for mild-moderate calcified lesions. ELCA is extremely efficient in fibrotic tissue as well as thrombus but not so much on calcium (Mehanna, E, et al. *Circ Cardiovasc Interv.* 2018;11:e006813). On the other hand, rotational atherectomy is a good indication for severely calcified coronary lesions at the right aorto-ostium (Motwani JG, et al. *Am J Cardiol.* 2000;85:563-567). The authors need to provide practical considerations on choosing between rotational atherectomy and ELCA to ablate severe calcium for vessel preparation in the aorto-ostial lesion.