
Response letter

Dear Editors and Reviewers:

Thank you for your letter and for the Reviewers' comments on our manuscript titled "Excimer laser coronary atherectomy in the treatment of a severe calcified coronary ostium lesion: A case report" (Manuscript NO: 66102). The comments were all very valuable and helpful in revising and improving our manuscript, as well as in providing significant guidance for our research. We have studied the comments carefully and made corrections, which we hope will meet with your approval. The revisions are indicated in the paper with red text. Our responses to the Editors and Reviewers' comments are as follows:

Responses to Reviewers' comments:

Reviewer #1:

1. Response to comment: (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.)

Response: We agree with you very much. We are very sorry for neglecting to perform IVUS after ELCA and balloon dilatation before stenting. A 2.0 mm × 12.0 mm balloon could not be expanded in the right ostium and a 2.5 mm × 12.0 mm NC balloon could not pass through the lesion. ELCA catheter did not go forward at a maximum fluence (energy) of 80 mJ/mm² and repetition rate of 80 Hz, but passed through the lesion at 45/60 (fluence/Hz) after small balloon dilatation. This indirectly suggested that alternative use of ELCA and balloon dilation could alter calcified plaque morphology.

2. Response to comment: (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.)

Response: We have added the following sentence to our manuscript: "Although ELCA may not be the first choice for severe calcified coronary ostium lesions as compared to rotational atherectomy, it may be used as an alternative in the following cases: thrombus, severe tortuosity, bifurcation, ostial coronary artery dissection, the failure of a Rotawire to pass through the target lesion, and severe heart failure. We successfully treated the severe calcified coronary ostium lesion by alternative use of ELCA and small balloon dilatation, but further studies are needed to evaluate the efficacy and safety of ELCA versus rotational atherectomy."

Responses to Editors' comments:

Science editor:

1. Response to comment: (Summary of the Peer-Review Report: this paper is well written and interesting to read. However please address the following concerns, authors need to demonstrate plaque modification by showing IVUS images including changes in plaque morphology after ELCA and balloon dilatation before stenting, provide practical considerations on choosing between rotational atherectomy and ELCA to ablate severe calcium for vessel preparation in the aorto-ostial lesion.)

Response: The same as above.

2. Response to comment:(Issues raised: (1) The authors did not provide original pictures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor; (2) References should be updated to recent literature; (3) Figure legends should be written per journal standard; (4) Manuscript format should be updated per journal standard; (5) Copyright License Agreement and Conflict-of-Interest Disclosure Form are missing. (6) Current informed consent is not acceptable, please provide the content on the hospital letterhead.)

Response: (1) We have provided original pictures using PowerPoint; (2) References have been updated to recent literature; (3) The figure legend has been written per journal standard; (4) Manuscript format has been updated per journal standard; (5) Copyright License Agreement and Conflict-of-Interest Disclosure Form have been provided; (6) The informed consent with the hospital letterhead has been provided.

Company editor-in-chief

Response: the same as above.

We earnestly appreciate the Editors' and Reviewers' excellent work. We have tried our best to improve the manuscript, and we hope the corrections will meet with your approval.

Once again, thank you very much for your comments and suggestions.

Yours sincerely,

Jun Guan