

### **Reviewer 1:**

The case is an interesting report about longitudinal stent deformation of an eluting stent, and give a detailed review about it. However, several recent studies related to the interest topic have been missed in following 4 open-published. If possible, please update it and make a better discussion. Papers

[1] von Birgelen C, Sen H, Lam MK, Danse PW, Jessurun GA, Hautvast RW, van Houwelingen GK, Schramm AR, Gin RM, Louwerenburg JW, de Man FH, Stoel MG, L?wik MM, Linssen GC, Sa?d SA, Nienhuis MB, Verhorst PM, Basalus MW, Doggen C, Tandjung K. Third-generation zotarolimus-eluting and everolimus-eluting stents in all-comer patients requiring a percutaneous coronary intervention (DUTCH PEERS): a randomised, single-blind, multicentre, non-inferiority trial. *Lancet*. 2014 Feb 1;383(9915):413-23. doi: 10.1016/S0140-6736(13)62037-1. Epub 2013 Oct 31.

[2] Pilgrim T, Heg D, Roffi M, T?ller D, Muller O, Vuilliamenot A, Cook S, Weilenmann D, Kaiser C, Jamshidi P, Fahrni T, Moschovitis A, Noble S, Eberli FR, Wenaweser P, J?ni P, Windecker S. Ultrathin strut biodegradable polymer sirolimus-eluting stent versus durable polymer everolimus-eluting stent for percutaneous coronary revascularisation (BIOSCIENCE): a randomised, single-blind, non-inferiority trial. *Lancet*. 2014 Dec 13;384(9960):2111-22. doi: 10.1016/S0140-6736(14)61038-2. Epub 2014 Sep 1. PubMed PMID: 25189359.

[3] Maeng M, Tilsted HH, Jensen LO, Krusell LR, Kaltoft A, Kelb?k H, Villadsen AB, Ravkilde J, Hansen KN, Christiansen EH, Aar?e J, Jensen JS, Kristensen SD, B?tker HE, Thuesen L, Madsen M, Thayssen P, S?rensen HT, Lassen JF. Differential clinical outcomes after 1 year versus 5 years in a randomised comparison of zotarolimus-eluting and sirolimus-eluting coronary stents (the SORT OUT III study): a multicentre, open-label, randomised superiority trial. *Lancet*. 2014 Jun

14;383(9934):2047-56. doi: 10.1016/S0140-6736(14)60405-0. Epub 2014 Mar 14. PubMed PMID: 24631162.

[4] Sen H, Lam MK, L?wik MM, Danse PW, Jessurun GA, van Houwelingen KG, Anthonio RL, Tjon Joe Gin RM, Hautvast RW, Louwerenburg JH, de Man FH, Stoel MG, van der Heijden LC, Linssen GC, IJzerman MJ, Tandjung K, Doggen CJ, von Birgelen C. Clinical Events and Patient-Reported Chest Pain in All-Comers Treated With Resolute Integrity and Promus Element Stents: 2-Year Follow-Up of the DUTCH PEERS (DUrable Polymer-Based STent CHallenge of Promus ElemEnt Versus ReSolute Integrity) Randomized Trial (TWENTE II). *JACC Cardiovasc Interv.* 2015 Jun;8(7):889-99. doi: 10.1016/j.jcin.2015.01.033. Epub 2015 May 20. PubMed PMID: 26003019.

Thank you very much for your suggestions. We have now added the recommended references and discussed a bit more the evidence regarding longitudinal stent deformation.

## **Reviewer 2**

The manuscript by dr. Panoulas et al. reports two cases of longitudinal deformation of a 22-mm and 34-mm third generation zotarolimus eluting stent. The issue brought up by the authors is interesting and the cases well documented. The specific comments are as follows: 1. The two cases of longitudinal deformation of the stents occurred when a stent longer than 20 mm was implanted in an ostial position. Might the length of the stent play a role in determining this phenomenon?

We would like to thank the reviewer for their comment. The structure of the stent suggests uniform laser fusing throughout the length of the stent hence it is anticipated that these stents should have similar longitudinal strength irrespective of stent length. A short sentence has now been added at the end of introduction to clarify this fact.

2.The authors hypothesize that deformation could be related to aggressive post-dilatation of the stent with a significantly larger non compliant balloon. Can the authors justify the reason to use this aggressive approach?

Since the left main stent had to extend into the ostial-proximal LAD and there was a large mismatch between the two vessels, aggressive post-dilatation had to be performed in the LMS to ensure the struts were well-apposed

3.Several of the abbreviations used are not explained in full length when they appear the first time; references are not in the editorial style.

Thank you very much, these corrections have now been made.

### **Reviewer 3**

In the case reports, Panoulas et al showed that longitudinal deformation after successful stenting may occur in the current third generation of drug-eluting stents. Given longitudinal deformation may be associated with the future complications such as stent restenosis or late thrombosis, the presentation of two cases is timely and important to highlight the rare but important complications during stenting.

Thank you very much for your kind comments.