POINT TO POINT ANSWER TO THE REVIEWERS' COMMENTS

REVIEWER #1

Scientific Quality: Grade B (Very good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Accept (General priority)

Specific Comments to Authors: An interesting read regarding an innovative tech for managing access site closure failure.

Thank you for your appraisal on our work. Regarding language polishing, we will do our best.

REVIEWER #2

Scientific Quality: Grade B (Very good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Accept (General priority)

Specific Comments to Authors: Good article

Thank you for your comments. Regarding language polishing, we will modify it.

REVIEWER #3

Scientific Quality: Grade B (Very good)

Language Quality: Grade A (Priority publishing)

Conclusion: Accept (General priority)

Specific Comments to Authors: *Perclose ProGlide XL or Prostar devices as presented in the article have been widely and successfully used for percutaneous vessel closure after TAVR procedures. Newer devices such as MANTA or PerQSeal are also available these days to seal large bore punctures. The idea of using patches/implants/pledgets for percutaneous vessel closure is implemented in PerQSeal devices, which use a fully absorbable synthetic implant for vessel punctures using large sheaths up to 24Fr. The new PerQSeal+ devices are also anticipated. The authors' technique of pletget assisted hemostasis has provided good results while performing hemostasis in bleeding patients after failure of double preclosure technique with double ProGlide suture. The authors aimed at avoiding manual compression or conversion to open procedures due to a difficult hemostasis, and have clearly described*

their technique. However, several limitations and questions arise. The authors mainly focused on describing the technique while paying little attention to statistical analysis of the data.

Thanks for such a general appraisal on our work.

1). Did the authors of the article perform a multivariate analysis of the possible risk factors associated with difficult percutaneous hemostasis (characteristics presented in table 1, iliac/femoral artery calcium score, femoral artery diameter, timing of the procedure, APTT?)?

Thank you for your comments. We didn't do multivariate analysis due to the small enrolled population and the low events incidence, but we will take it into the consideration for further analysis with a larger population. In this article, we mainly aim to demonstrate the feasibility of the new technique.

2). If so, there might be a cohort of patients initially requiring a different kind of hemostasis rather than using a ProGlide device, when even a double preclosure technique may fail. This may help avoid excess bleeding or the need for blood transfusion.

We fully agree with the reviewer's perspective. However, according to our experience, to avoid excess bleeding, proper puncture site selection and the "perfect puncture" is of great importance. By the systematic use of previously described angio-guidewire-ultrasound guidance (AGU technique) for femoral access, we are able to select proper puncture site, free of calcium, and managed to reduce the level of complications to a minimum. Regarding the hemostasis, we perform it with the double preclosure technique systematically, and in the case of failure, we are used to add an additional one (either ProGlide or AngioSeal), or to combine with balloon-assisted hemostasis (which can be applied immediately due to the presence of a ultra-long wire in the femoral artery going from the radial artery throughout the procedure) , and until recently with the pledget-assisted hemostasis as we described in our paper.

3). Did the authors evaluate the rate of stenotic lesions or thrombotic events in the target arteries following the pledget-assisted percutaneous hemostasis after the patients were dismissed from the hospital?

We did just in-hospital analysis, focusing on proper hemostasis. By routine angiography after the hemostasis, we were able to confirm proper hemostasis in all patients. No thrombotic events and no stenotic lesions were observed after pledget-assisted hemostasis. However, in one of our previously published paper (Shoeib O, Burzotta F, Aurigemma C et al.

Percutaneous transcatheter aortic valve replacement induces femoral artery shrinkage: angiographic evidence and predictors for a new side effect. Catheter Cardiovasc Interv. 2018;91(5):938-944), we described femoral artery shrinkage after double preclosure devices. In that paper, at multivariable analysis, pre-TAVR diameter stenosis and history of peripheral arterial disease were significantly associated with vascular complications. Certainly, the long-term follow-up is needed for further analysis and appraisal of this new technique.

4). Did those patients require additional managements such doppler sonography following the procedure, the use of antibiotics?

Thank you for your comments. No additional management was required. Periprocedural antibiotics prophylaxis is routine in TAVI procedures in our hospital. However, the long-term safety of this technique has still to be ascertained since specific complications like local infections might theoretically be triggered by the use of additional devices as we already mentioned as one of the study limitations.