

## Letter

# Complications of Replaceable Mitral Valve Placement, it's Possible Uses in Congenital Anomalies, and Patients Meeting Eligibility Criteria

Abdul Jabbar Dar\* and Waqas Rasheed

CHI St. Lukes, 4523 Maple Street Bellaire, USA

## DEAR EDITOR,

I have read the article entitled “ Innovative, Replaceable Heart Valve: Concept, In Vitro Study, and Acute In Vivo Study” by Fukamachi K et al, published in *Artificial Organs* 32(3):226–239. I want to congratulate the authors for this successful article and make some contributions.

In the article, it is indicated that in the first experiment mitral annulus was too small for prototype #27, and the valve was implanted in the supra-annular position, but the question that comes to our mind is that does the supra-annular position of the valve has any effect on post-implant complication like paravalvular leakage, endocarditis, thromboembolism, and mitral regurgitation [1-4]. And does the ability of the valve to withstand the high left ventricular systolic pressure of 375 mmHg without decoupling holds true in this case. What we would also like to bring to your attention is the need for various sizes of the implant to make sure that they fit anatomically [2]. Additionally, we would also like to define the inclusion or exclusion criteria for patients that could be considered for this implant [3] and whether if patients who previously have undergone mechanical valve replacement would be measured on the same criterion. Given the promising nature of this study, I wonder if the use of the valves is considered in patients with Turner's syndrome, congenital bicuspid aortic valve and those with premature aortic valve calcification [5,6]. At the end again we would like to thank the authors for their valuable contribution and hope that our observations are worthy of their attention.

## \*Corresponding author

Abdul Jabbar Dar, CHI St. Lukes, 4523 Maple Street Bellaire, Houston, Texas, USA, Tel: 4562310999; Email: [ajabbar.d@gmail.com](mailto:ajabbar.d@gmail.com)

Submitted: 19 February 2019

Accepted: 05 March 2019

Published: 07 March 2019

ISSN: 2378-9565

Copyright

© 2019 Dar et al.

ISSN: 2573-1297

OPEN ACCESS

## REFERENCES

1. Vesey JM, Otto CM. Complications of prosthetic heart valves. *Curr Cardiol Rep.* 2004; 6: 106-111.
2. Cho IJ, Hong GR, Lee SH, Lee S, Chang BC, Shim CY, et al. Prosthesis-Patient Mismatch after Mitral Valve Replacement: Comparison of Different Methods of Effective Orifice Area Calculation. *Yonsei Med J.* 2016; 57: 328-336.
3. Rosenhek R, Rader F, Klaar U, Gabriel H, Krejc M, Kalbeck D, et al. Outcome of watchful waiting in asymptomatic severe mitral regurgitation. *Circulation.* 2006; 113: 2238-2244.
4. Misawa Y. Valve-related complications after mechanical heart valve implantation. *Surg Today.* 2015; 45: 1205-1209.
5. Munir A, Wahab A, Khan M, Khan H, Htun WW, Schreiber TL. Transcatheter bicuspid aortic valve replacement in Turner syndrome: A unique experience of interventional cardiologist. *J Cardiol Cases.* 2018; 29-32.
6. Cao D, Chiarito M, Pagnotta P, Reimers B, Stefanini GG. Coronary Revascularisation in Transcatheter Aortic Valve Implantation Candidates: Why, Who, When? *Intervent Cardiol Rev.* 2018; 13: 62-65.