Corrigendum

Corrigendum to “Evaluating the Hemodynamical Response of a Cardiovascular System under Support of a Continuous Flow Left Ventricular Assist Device via Numerical Modeling and Simulations”

Selim Bozkurt and Koray K. Safak

Department of Mechanical Engineering, Yeditepe University, Kadikoy, Istanbul 34755, Turkey

Correspondence should be addressed to Selim Bozkurt; s.bozkurt@ucl.ac.uk

Received 5 August 2019; Accepted 10 August 2019; Published 3 September 2019

Copyright © 2019 Selim Bozkurt and Koray K. Safak. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

In the article titled “Evaluating the Hemodynamical Response of a Cardiovascular System under Support of a Continuous Flow Left Ventricular Assist Device via Numerical Modeling and Simulations” [1], there were errors in equations (4) and (7) that should be corrected as follows:

1. In equation (4), the left ventricular volume change \( \frac{dV_{lv}}{dt} \) was described as the difference between flow rates through the mitral valve \( Q_{mv} \) and aortic valve \( Q_{av} \). The equation should be as follows:

\[
\frac{dV_{lv}}{dt} = Q_{mv} - Q_{av}.
\]  

(4)

2. In equation (7), the HTA model and the circulatory system model were combined to simulate the CF-LVAD assistance using the equations which describe the left ventricular volume change \( \frac{dV_{lv}}{dt} \) and systemic arterial pressure change \( \frac{dp_{as}}{dt} \). The equation should be corrected as follows:

\[
\frac{dV_{lv}}{dt} = Q_{mv} - Q_{av} - Q_{HTA},
\]

\[
\frac{dp_{as}}{dt} = \frac{Q_{av} + Q_{HTA} - Q_{as}}{C_{as}}.
\]  

(7)

These equations were used correctly in the computations and errors appear only in the text.

References
