



Letter to the Editor

Reply to the “Letter to the Editor” by Dr. Lin[☆]Johan Heiberg^{*}, Vibeke E. Hjortdal

Dept. of Cardiothoracic and Vascular Surgery, Aarhus University Hospital, Aarhus, Denmark
 Dept. of Clinical Medicine, Aarhus University, Aarhus, Denmark

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Dear Dr. Lin,

Thank you for your appreciation of our work as well as your thoughtful comments. We have read your input with great interest. We agree that knowing the type of defect is important for proper interpretation of the results. In our cohort of operated patients, approximately two thirds of the patients had perimembranous VSDs, one third had muscular VSDs, but none of them had subarterial VSDs. Importantly, there was no association between the defect type and the degree of impairment in heart rate variability.

We defined a small VSD as any defect in the ventricular septum deemed ‘hemodynamically insignificant’ as agreed upon by consensus

between cardiologists and cardiac surgeons. It is unfortunate that these patients are only rarely catheterized, however, a subgroup of approximately two thirds of our patients had also been enrolled in a previous study in which we performed an MRI-based assessment of their shunt sizes [1]. In that study, all of the enrolled 29 patients had a shunt size below 1.5 and the mean Qp/Qs was 1.2 ± 0.1 .

Lastly, as pointed out in your comments, we also observed clinically important arrhythmic events in some patients with open VSDs. As an example, a 31-year old, physically active and completely asymptomatic, male with an uncorrected defect developed episodes of asymptomatic, non-sustained ventricular tachycardia. The 24-hour Holter monitoring showed 70 episodes of non-sustained ventricular tachycardia up to 16 s and 284 beats/min. This emphasizes that close long-term follow-up is mandated in some cases and should generally be carefully considered.

Reference

- [1] M. Maagaard, J. Heiberg, B. Asschenfeldt, S. Ringgaard, V.E. Hjortdal, Does functional capacity depend on the size of the shunt? A prospective, cohort study of adults with small, unrepaired ventricular septal defects, *Eur. J. Cardiothorac. Surg.* 51 (4) (2017) 722–727.

[☆] All authors take responsibility for all aspects of the reliability and freedom from bias of the data presented and their discussed interpretation.

^{*} Corresponding author at: Aarhus University Hospital, Dept. of Cardiothoracic & Vascular Surgery, Palle Juul-Jensens Boulevard 99, 8200 Aarhus N, Denmark.

E-mail address: johan.heiberg@clin.au.dk (J. Heiberg).