





## DISCUSSION

Pregnancy results in profound physiologic changes. Chief among these changes are increases in cardiac output, heart rate, blood volume, biventricular stroke work and oxygen consumption. Also, women with congenital heart disease may not tolerate these hemodynamical changes very well. However, most women with unrepaired ASDs have successful pregnancies (8). In addition, ASDs can cause left-to-right shunts and volume overload of the right atrium and RV. In our patient, the maximal PV gradient was overestimated for these two reasons. We know the planimetric method is not affected by flow rate (4); thus, it is more useful than gradient- and velocity-based classifications, especially in situations such as these.

We were unable to provide a correct treatment decision based only on symptoms such as dyspnoea, palpitation or chest pain because these symptoms are common among pregnant women. Symptom- and Doppler-based misclassifications of PS may influence the accuracy of the valvuloplasty time and may lead to a termination of the pregnancy due to unnecessary radiation exposure. Therefore, the 3D TEE planimetric method is useful and safe, especially in the RV volume overloading period when the transvalvular peak gradient of the PV is affected. The planimetric calculation of the PV opening area using 3D TEE may be helpful, especially when specialized conditions such

ASD or/and pregnancy can cause inaccurate recordings of the transvalvular peak gradient and maximal velocity.

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Uncorrected Proof