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Letter to the Editor: Aortic valve repair in patients with ventricular septal defect

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Letter:

To the editor,

We read with great interest the article "Aortic valve repair in patients with ventricular septal defect" by Kaskar A et al.[1] We appreciate all the authors for their efforts and contribution to the vast field of Cardiology and for expanding the current literature. We praise all the findings of this article which highlights the

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beneficial outcomes of aortic valve repair following Ventricular Septal Defect (VSD) repair from the aspect of mortality and intervention. However, we would like to present a few concerns in the context of this article.

Firstly, the authors did not highlight whether any genetic mutations were present or not. In this case, point mutation in T-Box Transcription Factor 5 (TBX5) and GATA Binding Protein 4 (GATA4) gene can present with cardiac malformations.2 Moreover, a TBX5 polymorphism has also been reported to be associated with VSD.[2]Moreover, authors could have mentioned the effects of environmental factors; which include maternal infections; such as influenza and rubella, teratogens like radiation, alcohol, and untreated maternal metabolic diseases such as phenylketonuria and maternal diabetes on increasing the chances of development of VSD.[2] Aortic valve repair is also associated with significant improvement in patients with Pulmonary Hypertension, which is a systemic disease.[3] Even though this is not a primary aim of the procedure, this is indeed of great significance. Therefore, the authors should have documented this. Research conducted in 2007,[4] emphasized on how the socio-economic status of each patient is associated with their post-operative care quality. An isolated centered study does not have access to this kind of information, which limits this perspective of the study. Hence the authors should have claimed this as one of the limitations. The study cohort comprised the younger population only; consequently, the result could not be generalized.

Thirdly, the article mentions a case where the patient acquired valvular damage with Infective Endocarditis (IE) after undergoing the procedure for aortic valve repair, which became the cause of death. A complete hematology workup could have been done to figure out the grounds followed by a treatment plan accordingly, which could have prevented the casualty, as supplemented by a conducted in 1975.[5]

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