

## “Learning curve” in congenital cardiac surgery

To the Editor,

We congratulate Sarısoy et al. (1) for their study. We found their successful results of congenital heart surgery operations. Because these operations require a lot of effort and time.

In this study, they mainly discussed the long-term results of atrioventricular septal defect (AVSD) operations. One of the issues that draw our attention is the relationship between the date of operation and the results of the operation. In this study, they mentioned the differences in the reoperation rates and postoperative left ventricular outflow tract obstruction rates between the operations performed in the early 2000s and the current operations. When we examined the study, we found that there was less success rate in terms of these parameters in the operations in the early 2000s, but there was no difference in terms of early mortality. The authors reported that their better understanding of myocardial protection methods and perfusion methods and the more frequent use of intraoperative transesophageal echocardiography (TEE) have impact on these results. At this point, we want to make some contributions to the authors. The authors' comments, without any data in their hands, are based on their personal experience. However, we do not fully agree with these comments. The development and better understanding of myocardial protection or perfusion methods will have an absolute effect on some early postoperative data, such as early postoperative low cardiac output or inotropic support demand, early postoperative neurological complications, or, most importantly, early mortality. Other parameters that were emphasized by the authors were related to late-term results, except for early mortality. Moreover, it is understood that there is no difference in terms of early mortality between the years studied. In one of the studies cited in the article by Sarısoy et al. (1), Crawford and Stroud (2) reported that they found a relationship between the date of surgery and early mortality while examining the results of AVSD operations. Another supporting data in the same study is the differences in cardioplegia methods used between years studied. In other words, it can be concluded that early postoperative mortality decreases due to different cardioplegia methods used in the study of Crawford and Stroud (2). As a result, myocardial protection or perfusion methods can only affect early postoperative data.

Conversely, Sarısoy et al. (1) stated that the cause of the relationship between the date of surgery and some late-term results may be the more frequently used perioperative TEE. This inference seems to be more logical than their opinion about

myocardial protection and perfusion methods mentioned above in terms of influencing late-term surgical results. Because the use of intraoperative TEE provides us the opportunity to intervene by detecting a residual septal leak or valve insufficiency after the procedure, it may reduce the need for possible late-term reoperation or valve replacement. We are curious about the authors' view on whether or not the use of intraoperative TEE has such an effect on surgical procedures in their daily practices, especially in these operations. Maybe the most important question that should be asked is as follows: Is it a “learning curve” in these operations because it is frequently mentioned in daily literature? We believe that learning about the authors' views on this subject will add value to their study.

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### References

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2. Crawford FA Jr, Stroud MR. Surgical repair of complete atrioventricular septal defect. *Ann Thorac Surg* 2001; 72: 1621-8. [\[CrossRef\]](#)

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### Author's Reply

To the Editor,

We appreciate your contribution to our study (1). We would like to clarify a few points. As we observe in your kind objection, the issue is the lack of concordance between early mortality rates and surgical era, as one would expect. With improving