

## Physician - Minimal Invasive, TAVI, Robotic Cardiac Surgery

[MSB-45]

### Minimally Invasive Mitral Valve Surgery in Fibrillation or Beating Heart: A Comparative Study

Murat Kadan, Kubilay Karabacak, Tuna Demirkiran, Furkan Burak Akyol, Yigit Tokgoz, Veli Can Ozdemir, Huma Kekecdil, Gizem Isik

*Gülhane Training and Research Hospital, Ankara, Türkiye*

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E-mail: ozdemirvelican@gmail.com

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**Objective:** This aimed to share our results of minimally invasive mitral valve surgery in fibrillation or beating heart.

**METHOD:** The postoperative outcomes of 33 patients (mean age: 61.7 years) who underwent mitral valve surgery in fibrillation (n=14) or beating heart (n=19) with minimally invasive methods between February 2019 and May 2024 were retrospectively analyzed.

**Results:** Twenty-seven patients underwent isolated mitral valve surgery. Thirty patients were reoperated cases. The mean cardiopulmonary bypass duration of patients operated on with a beating heart was  $204 \pm 62$  min, while it was  $148 \pm 37$  min in the fibrillation group. The mean duration of postoperative hospitalization was  $14 \pm 15$  days for patients operated on with beating heart and  $9 \pm 3$  days in the fibrillation group. The mean drainage amount was  $580 \pm 488$  mL in patients operated on with beating heart and  $680 \pm 520$  mL in the fibrillation group. There was no stroke in both groups. There was no significant difference in terms of the compared parameters and early postoperative mortality in both groups.

**Conclusions:** Right anterolateral thoracotomy has advantages in reoperated mitral valve surgery such as no sternotomy, avoidance of possible complications, limited dissection of adhesions, and less postoperative drainage. Mitral valve surgery in a beating heart or fibrillation are methods that can be used in the same patient group. Both methods have advantages and disadvantages, but both methods are effective and safe in reoperated patients.

**Keywords:** Beating heart, fibrillation, minimally invasive, mitral valve surgery.