

Others - Other

[MSB-07]

Optimizing Postoperative Cardiac Tamponade Outcomes With Posterior Pericardial Window

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Objective: The study aimed to assess the posterior pericardial windows technique in the management of pericardial effusion following cardiac surgery.

Methods: This single-center study examined the data of 1,752 patients who underwent cardiac surgery from 2018 onwards, excluding those who had off-pump coronary artery bypass grafts or emergency surgeries for conditions such as type 1 aortic dissection or infective endocarditis. Of the included patients, a posterior pericardial window was created in 349. The posterior pericardial window was created using electrocautery before the implantation of prosthetic valves or distal anastomosis. No other procedural changes were made.

Results: Postoperative drainage rates were monitored. Drains were removed on the second day after surgery. Of the patients with a posterior pericardial window, eight (2.3%) required revision due to tamponade within the first two postoperative days, compared to 53 (3.7%) of the patients without a posterior pericardial window. Patients who required revision were discharged on average seven days later, while those who did not require revision were discharged after five days.

Conclusion: The early detection and effective management of cardiac tamponade are crucial due to the potentially life-threatening outcomes. This study highlights the value of the posterior pericardial window technique in reducing complications associated with pericardial effusion following cardiac surgery. The findings support the need for further research to improve surgical approaches and enhance patient outcomes and safety.

Keywords: Cardiac tamponade, early tamponade, pericardial effusion, posterior pericardial window.



Figure 1. Intraoperative image demonstrating the creation of the posterior pericardial window using electrocautery.



Figure 2. Opening the posterior pericardial window with electrocautery.

References

1. Kuvin JT, Harati NA, Pandian NG, Bojar RM, Khabbaz KR. Postoperative cardiac tamponade in the modern surgical era. *Ann Thorac Surg* 2002;74:1148-53. doi: 10.1016/s0003-4975(02)03837-7.
2. Borregaard B, Sibilitz KL, Weiss MG, Ekholm O, Lykking EK, Nielsen SN, et al. Occurrence and predictors of pericardial effusion requiring invasive treatment following heart valve surgery. *Open Heart* 2022;9:e001880. doi: 10.1136/openhrt-2021-001880.