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## Case Series

## Surgical Experience with Normothermic Cardiopulmonary Bypass- 3 Years of History: Retrospective Case Series of 50 Patients

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## ABSTRACT

**Introduction:** Numerous beneficial mechanisms have been linked to normothermic open cardiac surgical procedures. The objective of our research is the evaluation of the experience in the Hospital General de la Plaza de la Salud, after 50 cases, as a propitious moment to assume it as an option Pursues to nurture the debate with the evaluation of patients who underwent different open cardiac surgical procedures using normothermia.

**Materials and Methods:** This is a prospective, case series study, which includes a sample of 50 patients who underwent normothermic open cardiac surgery requiring cardiopulmonary bypass from 2017 to 2021.

**Results:** Of the sample, 30% (n=15) accounted for procedures involving aortic valve replacement on cardiopulmonary bypass, 42% (n=21) accounted for mitral valve replacement, and 28% (n=14) of case represented open coronary vessels interventions on cardiopulmonary bypass. The average age for such procedure was 49.6 years. An average of 83.5 minutes were spent on cardiopulmonary bypass. On average, patients underwent 64.8 minutes with clamped vessels. Average blood loss was quantified in milliliters for the three procedures and was reported for the 1<sup>st</sup> hour, 4<sup>th</sup> hour, and the 12<sup>th</sup> hour after procedure initiation as well as total quantified blood loss. The combined set of procedures represented a cumulative average of 272.3 mL of blood loss. Haemoglobin percent change for the cases included in the study were represented by an average change of -.002% for all procedures. On average, patients undergoing all procedures required 1.3 whole blood packets and 1.2 packets of fresh frozen plasma. Hospital stays, counted from the day of admission to the day of discharge, was another factor evaluated for the study. 8.2, 8.0 and 8.8 days represented the average hospital stay for patients undergoing aortic valve replacement, mitral valve replacement and coronary interventions respectively.

**Conclusion:** Normothermia during cardiothoracic surgery that employed cardiopulmonary bypass is a safe and effective strategy.

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