

Department of Cardiac Anaesthesia & Critical Care

Departmental Research Projects (Ongoing)

S. No.	Title of the project
1	Implications of right ventricular outflow tract obstruction on right ventricular diastolic function in tetralogy of fallot using conventional transesophageal doppler parameters and RA strain – A prospective observational cohort study.
2	Implications of intraoperative right ventricular strain on immediate post operative outcome after intracardiac repair for Tetralogy of Fallot - A prospective, observational cohort study
3	Can left atrial strain accurately reflect on left atrial pressure ? A prospective observational study on correlation of intraoperative transesophageal echocardiography and pulmonary capillary wedge pressure measured by pulmonary artery catheter in patients undergoing elective isolated coronary artery bypass graft surgery.
4	Comparative Evaluation of transesophageal and transthoracic lung ultrasound for post operative pulmonary outcomes in the ICU.
5	Heparin Dose Response Curve for Heparin Dose Determination in Pediatric Cardiopulmonary Bypass for Cardiac Surgery: A Randomised Control Trial
6	Predictive value of two-dimensional and three-dimensional Transesophageal Echocardiography derived Mitral and Aortic valve annular diameters for prosthetic valve sizing.
7	A comparative study of Rhomboid intercostal plane block and pectoralis plane block in cardiac device implantation - randomised control trial
8	Comparison of Intravenous Vs Topical Tranexamic Acid in patients undergoing Intracardiac Repair for Tetralogy of Fallot: Clinical Efficacy and Safety
9	A Comparative Study Of Thoracic Segmental Spinal Anaesthesia With General Anaesthesia Vs General Anaesthesia Alone For Fast Track Cardiac Anaesthesia: A Randomised Control Trial
10	Oral Melatonin versus Oral Alprazolam premedication in geriatric cardiac surgical patients: Comparative assessment of anxiolytic, sedative, glycemc and cardioprotective effects- A Randomized Controlled Study.
11	Immediate impact of Mitral Valve Replacement on left atrial strain in mitral stenosis of rheumatic origin - A transesophageal strain study
12	Correlation of Left Atrial Stiffness Index (LASI) with Left ventricular diastolic dysfunction and Outcomes in Aortic Stenosis patients undergoing surgical aortic valve replacement – An Observational Study

13	Impact of left ventricular diastolic function on right ventricular size and function in adult patients undergoing coronary artery bypass grafting surgery on cardiopulmonary bypass
14	Prediction of Fluid Responsiveness by PVI in Patients undergoing Coronary Artery Bypass Graft Surgery: A Comparison Between Dynamic Hemodynamic Parameters
15	Implications of right ventricular outflow tract obstruction on right ventricular diastolic function in tetralogy of fallot using conventional transesophageal doppler parameters and RA strain – A prospective observational cohort study.
16	Restrictive Versus Liberal Red Blood Cell Transfusion Strategy in Chronic Anaemic Patients Undergoing Cardiac Surgery: A Prospective Randomized Study
17	Comparison of ROTEM and Conventional Coagulation Tests in Predicting Bleeding Risk and Guiding Transfusion in Pediatric Cyanotic Congenital Heart Disease Patients on VA ECMO “
18	Prognostic Biomarkers in patients on Extracorporeal Membrane Oxygenation post cardiac surgery for bleeding, thrombosis and infection.
19	A Comparative Study of Intrathecal Morphine vs Intrathecal Buprenorphine for Fast Track Cardiac Anaesthesia: A Randomised Control Trial
20	To assess the feasibility of adequate anti coagulation with unfractionated heparin when administered based on lean body weight in adult patients posted for cardiac surgery in a tertiary care hospital: An observational study
21	Comparison of Left Atrial Systolic Force with other parameters of Left atrial function and their association with perioperative outcomes in paediatric patients undergoing VSD closure: A Prospective Observational study.
22	Relationship of Left Atrial Systolic Force with Left Atrial Strain and other Left Atrial Functional Parameters and their Association with Perioperative Outcomes in Adult Patients with Aortic Stenosis Undergoing Surgical Aortic Valve Replacement(AVR) using Transesophageal Echocardiography(TEE): A Prospective Observational study
1	<u>INTERDEPARTMENTAL:</u> Comparative effect of levosimendan and milrinone on pulmonary artery pressure in pediatric patients undergoing corrective surgery for congenital heart disease with pulmonary hypertension: A randomized double blinded clinical trial (AIIMS intramural research project; Deptt. of Cardiac Critical Care).
2	A Randomized Controlled pilot study comparing st Thomas and delnido cardioplegia in patients undergoing bentall procedure with the department of Perfusion, CTVS, AIIMS, NEW DELHI
3	Comparison of Aortic flow velocities comparing trans caring NIRS in Bentall surgery