

CARDIO VASCULAR THORACIC SURGERY DEPARTMENT (CVTS)

The CVTS department is well equipped with cardiac OT and ICU along with all latest machineries to provide tertiary health care to all cardiac patients coming from different railways & it is functioning excellently since 2013 and touched many milestones in Indian railways over last few years.

Our cardiac OT is one of the well-equipped OT in the city and all the latest surgical accessories are there to deal any complex cardiac surgery with facilities of ECMO, TEG, CELL SAVER, Minimal invasive instruments cardiac surgery instruments, Pediatric cardiac surgery set and Thoracic surgery set etc.

CVTS ICU – Six bedded ICU with latest Philips multipara monitor. 2 IABP machines and 1 mobile echo machine (shared with cardiology). Inability to manage all types of complex cardiac post-operative patients.

STAFF:

IRHS-

Dr Ajaykumar R Pandey, Sr DMO (CVTS Surgeon)

Dr Suwendu Panda , ADMO , Cardiac Anaesthesiologist.

Visiting Consultant:

DrBehranwala (CVT Surgeon)

DrUmbarkar (CVT Surgeon)

Dr Kamlesh Jain (CVTS surgeon)

Sr.Residents (Shared with cardiology) :

Medicine- 3

Anaesthesia -3

Surgery- 3

Work load/Annum(average)

Cardiac Surgeries –300

Thoracic and Vascular surgeries – 100 (avg).

CATH LAB

Services offered

Coronary artery bypass grafting, valve repair and replacement, AV fistula creation and repair, aortic aneurysm repair and grafting, pericardiotomy, myectomy, peripheral vascular bypass grafting, surgical removal of intra cardiac tumor, surgical correction of ASD/VSD/PDA, epicardial pace maker insertion. myectomy for HOCM.

Work load

CVTS SURGERIES

SR NO	NAME OF PROCEDURE	2019	2020	2021	2022	2023	TOTAL since installation
1	CARDIAC	177	51	123	185	109	1530
2	NON CARDIAC	44	8	08	25	48	369
	TOTAL	221	59	131	210	157	1899

ACHIVEMENTS:

1. Regularly performing all types of complex cardiac surgeries.
2. Started Paediatric Cardiac Surgery program.
3. Started regularly doing Minimally Invasive cardiac surgical procedures like MICS ASD, MICS CABG, MICS Mitral Valve Replacements.
4. Recently started our VATS (VIDEO ASSISTED THORACOSCOPIC SURGERY PROGRAM) and successfully did VATS thymectomy for a 14 yrs old Myasthenia Gravis Patient.

Dr Ajay Pandey- (IRHS CVTS SURGEON) joined initially NRCH (NR) in Jan 2022 and was later transferred to JRH in June 2022.

He manages CVTS surgery part of the department along with Dr Suvendu.

He has special interest in Pediatric Cardiac surgery, Minimally Invasive Cardiac Surgery.

He wish to further train himself in Heart Failure surgeries and thoracic organ transplant.

Training:

1. MCh CVTS from prestigious King George Medical University, Lucknow (Gold Medal).
2. Training in Pediatric Cardiac Surgery at Sir Ganga Ram Hospital, New Delhi.
3. Worked as Consultant In Fortis Escorts group hospital, New Delhi.

Research:

- (1) Kanna S, Pandey A, Aggarwal N, Joshi RK, Joshi R. Aneurysm of Pulmonary Sinus of Valsalva: Successful Management of a Case. *Ann Thorac Surg.* 2022 Jan;113(1):e37-e39. doi: 10.1016/j.athoracsur.2021.03.050. Epub 2021 Mar 29. PMID: 33794165.
- (2) PandeyAR,AgarwalS,JoshiR,AgarwalN,AggarwalM,JoshiR.Techniques to avoid hypothermic circulatory arrest in the management of renal tumor with right atrium extension in children. *IndianJ ThoracCardiovascSurg.* 2022 Jan;38(1):92-95. doi: 10.1007/s12055-021-01256-4. Epub 2021 Sep 29. PMID: 34898884; PMCID: PMC8630269
- (3) Pandey A R, Kar S, Aggarwal N, Bhargava S, Khantwal Joshi R, Joshi R. A review of the Yasui operation with long-term follow-up of a case. *IndianJ Thorac Cardiovasc Surg.* 2021 Sep;37(5):533- 541. doi: 10.1007/s12055-021- 01174-5.Epub2021Aug3.PMID:34511760;PMCID: PMC8387522.
- (4) Kumar A, Pandey AR, Chandra S, Kumar B. Comparison of del Nido's cardioplegia with St. Thomas's cardioplegia for myocardial protection in adult open-heart surgery. *Heart India* 2019;7.
- (5) Pandey A.K., Singh S.K., Devenraj V. et al. Pneumopericardium: a rare complication following pericardiocentesis. *Indian J Thorac Cardiovasc Surg* (2019) 35: 493. <https://doi.org/10.1007/s12055-018-00785-9>.
- (6) Kumar A, Pandey AR, Prakash V, Singh V, Tandon S, Yadav S. Lower gastrointestinal bleeding due to iliac artery-cecal fistula: A late presentation of blunt injury abdomen. *Indian J Vasc Endovasc Surg*2017;4:209-10.
- (7) Pandey AK (2021) Gastric Outlet Obstruction Due to Primary Duodenal Tuberculosis - A Case Report on Rare Presentation of an Uncommon Condition. *Arch Med Vol.* 13 No. 5:24.

PRESENTATIONS:

- ☑ Bagged 1st prize in competitive paper presentation at JASICON 2013 for the paper "Study of skin staples v/s conventional sutures for inguinal skin wound closure."
- ☑ Presented paper successfully at JIMACON 2013.
- ☑ Participated and presented academic cases in clinical surgery update 2013 and 2014.

☑ Participated and presented academic cases in MAMC GENERAL SURGERY UPDATES 2014 and 2015.

☑ Participated and presented academic cases in RAMCHANDRA MEDICAL COLLEGE, Chennai (ARRC).

☑ Participated and presented paper and poster at IACTSCON 2017 and 2019.

☑ Presented paper on ECMO- Salvage of a 9 month kid with absent right pulmonary artery at Delhi Chapter conference of IACTS in 2020.

☑ Presented Case on renal tumour excision in Paediatric case avoiding hypothermia at IACTS 2021.

Dr Suwendu Panda joined as ADMO Cardiac Anaesthesiologist and performing all complex cardiac surgeries and pediatric surgery independently and successfully.

1. Panda S, Chatterji C, Muralidhar V, Rojalin Baby SK, Shrivastav T. Comparison of confirmation of placement of laryngeal mask airway by fiberoptic laryngoscope and ultrasound examination: A feasibility study. Bali J Anaesthesiol 2021;5:83-7.

2. Panda S, Pujara J, Chauhan A, Varma A, Venuthurupalli R, Pandya H. et al. Comparative study of intranasal dexmedetomidine v/s midazolam for sedation of pediatric patients during transthoracic echocardiography. Ann Card Anaesth 2021;24:224-94-9.

3. Panda S, Baby S.K.R., Thosani R: evaluation of efficacy of ultrasound in detecting correct placement of central venous catheter and determining the elimination of the need for chest radiography. Journal of Cardiac Critical Care TSS 2021;01:01.

4. Panda S, Gandhi H, Surti J, Mishra A, Champaneri B. Anesthetic and intensive care management of left main coronary artery to main pulmonary artery fistula diagnosed in postoperative case of tetralogy of fallot. Ann Card Anaesth 2021;24:272-4.

5. Panda S, Baby S.K.R., Singh G. Spinal Muscular Atrophy Type II: Anesthetic Challenges and Perioperative Management. Journal of Cardiac Critical Care TSS 2021; 05(03): 249-251

PAPER PRESENTATIONS

Anesthetic and intensive care management of left main coronary artery to main pulmonary artery fistula diagnosed in postoperative case of tetralogy of fallot-- IACTA GOA on 7/2/2020.

Comparative study of intranasal dexmedetomidine v/s midazolam for sedation of pediatric patients during transthoracic echocardiography AT JANAK MEHTA AWARDS - IACTA GOA on 8/2/2020.

Evaluation of efficacy of ultrasound in detecting correct placement of central venous catheter and determining the elimination of the need for chest radiography- Dr. V. A. Punnoose Young Scientist Award THE SOCIETY OF ANAESTHESIOLOGY DELHI AND NCR BRANCH- on 19/12/2020.

FUTURE PLAN FOR DEPARTMENT.

- Doing MICS and VATS regularly
- Plan for Robotic cardiac intervention and surgery/ventricular assist surgery(LVAD/RVAD)
- Availability of a full time perfusionist in the department
- To high light and focus JRH at national and international level more and more .