# CARDIOLOGY

### **INTRODUCTION**

Department of Cardiology is a vital part of the Medical College and Hospital. Here, training is provided to various level of personnel in Cardio Vascular Sciences. Two Post Doctoral students are taken in every year for training in DM Cardiology. In addition, MD (General Medicine) and MBBS students are trained. Nurses and Technicians are also imparted expert education in Cardiology here.

#### PATIENT SERVICES & FACILITIES

#### Non Invasive Services

ECG Colour Doppler & 3-D Echocardiography Trans Esophageal Echocardiography Stress Echocardiography Paediatric Echocardiography Peri Operative Echocardiography Treadmill Exercise Stress Test Holter Monitoring 24 Hours Ambulatory BP Monitoring Head Up Tilt Test

#### **Invasive Services**

Coronary Angiography **Diagnostic Cardiac Catheterisation** Pulmonary Angiography Aortography Renal Angiography Coronary Angioplasty Rotational Atherectomy (Rotablator) Intra Vascular Ultra Sound (IVUS) Coronary Invasive Physiology (FFR, DFR) Intra Aortic Balloon Counter Pulsation (IABP) Optical Coherence Tomography Renal Angioplasty **Temporary Pacemaker Insertion** Permanent Pacemaker Implantation Automatic Implantable Cardioverter Defibrillator (AICD) Implantation Cardiac Resynchronisation Therapy (CRT) & CRT-D Electrophysiological Study & Radio Frequency Ablation (EPS & RFA) Trans Coronary Alcohol Ablation of Septal Hypertrophy (TASH)

Valvuloplasty, including PTMC, BPV, BAV, BTV Device Closure of ASD, PDA, VSD, PFO Trans Catheter Aortic Valve Replacement (TAVR)

At this hospital, all patients with ST elevation myocardial infarction are offered Primary Angioplasty (PAMI), which is the gold standard treatment for heart attack.

### **INFRASTRUCTURE**

The department is full-fledged, with state-of-the-art equipment for diagnostic and therapeutic services. Ultra-modern facilities to establish difficult diagnosis, manage complex conditions translate into a world class experience for the patient. The following equipment is held in the department:

- Cardiac Cath Labs: Two modern Cath Labs, make Philips, including Rotablator (Boston Scientific), Fractional Flow Reserve (FFR), and Intra Vascular Ultra Sound (IVUS)
- 2. Echocardiography: Two echo machines, GE & Philips, provide for 2-D, Colour Doppler, 3-D, and Trans Esophageal imaging.
- 3. Holter
- 4. Ambulatory BP
- 5. Treadmill Exercise Test

# ACADEMICS

The following courses are conducted in this Department:

- 1. DM (Cardiology). 02 seats per years, likely to be increased to 05
- 2. MD (General Medicine). Students are trained in rotation through this Department.
- 3. MBBS. Classes and clinics are taken by faculty from this Department.
- 4. BSc Cardio Vascular Technology.
- 5. PG Diploma Non Invasive Cardiology (Technician)
- 6. PG Diploma in Invasive Cardiology (Technician)

# **UPCOMING FACILITIES**

The Department of Cardiology will shift soon to the 3<sup>rd</sup> floor of the new Super Specialty Hospital. A new-state-of-the art Cath Lab is already installed. With addition of Cardiac Surgery, the full gamut of interventions will be done, including structural and congenital heart diseases.

# **ACHIEVEMENTS**

The Department has grown from strength to strength over the past few years. Some recent achievements are:

- 1. Successful result of DM Cardiology exams over two years.
- 2. Conduct of DNB Cardiology exam at Bharati Vidyapeeth in August 2021. This is the first Super Specialty DNB exam held at this hospital.
- 3. Number of publications from the Department in indexed journals. There are 28 publications over two years from the faculty of this Department.
- 4. Faculty have been speakers/ moderators/ chairpersons at various academic fora.
- 5. Non coronary interventions have been started. In 2020,. The first Trans-coronary Alcohol Ablation of Septal Hypertrophy for HOCM, a very high risk procedure, was done for the first time at Bharati Hospital.