



Dr. C. Kodhandapani
Raamaanujadaasudu
M.S.,M.Ch.,

**Chief Cardiovascular & Thoracic
Surgeon**

NARAYANA

Superspeciality

HOSPITALS

NELLORE



World's First Successful Heart Surgery

- In 1893, Dr. Daniel Hale Williams performed the first successful open heart surgery at Provident Hospital on the South Side. The patient was James Cornish, who had stabbed in the chest during a barroom brawl.



The First Successful Open
Cardiac surgery was
performed in 1953 using
Cardiac pulmonary bypass
machine

ASD of a patient was closed
successfully


NELLORE



Types of Heart Surgeries

- **Coronary Artery Bypass Grafting**
- **Heart Valve Repair or Replacement**
- **Surgical Treatment for Arrhythmias**
- **Aneurysm Repair**
- **Heart Transplant**
- **Surgery To Place Ventricular Assist Devices or Total Artificial Hearts**

CVTS Team

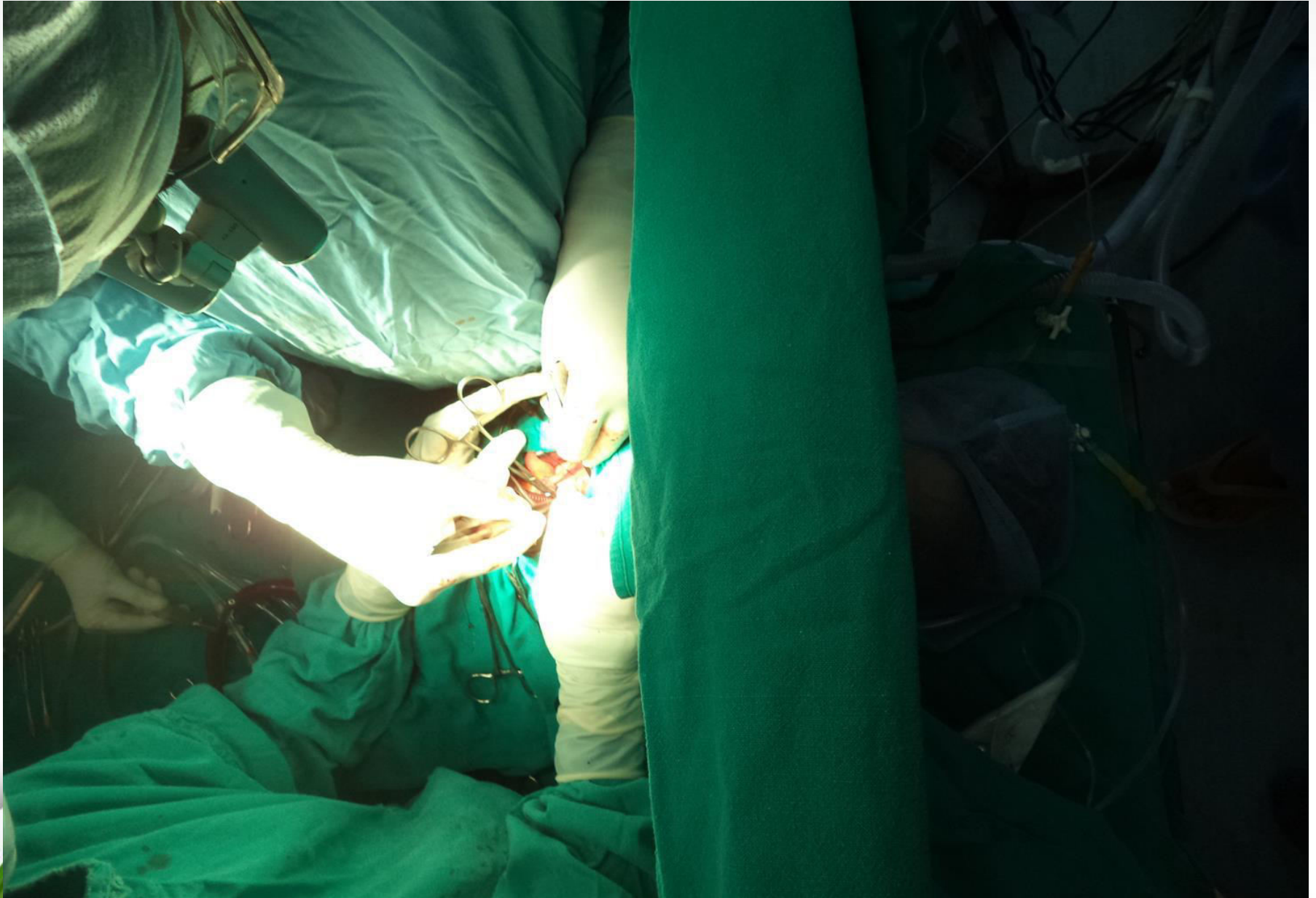
- The cardiovascular surgeon, who heads up the surgery team and performs the key parts of the surgery.
 - The assisting surgeons, who follow the direction of the cardiovascular surgeon.
 - The cardiovascular anesthesiologist,.
 - The perfusion technologist, who runs the heart-lung machine.
 - The cardiovascular nurses, who are specially trained to assist in heart surgery.
 - The CTICU trained staff who play a key role in the postoperative care
- 

The TEAM

- Headed by the surgeon
- Supported by the ANAESTHITIST
- Assisted by the surgeon/physician assistant
- Perfused by the perfusion technician
- Executed by the Resident clinician
- Assisted by the Nursing staff
- Cooperated by the house keeping personnel
- Facilitated by the Management
- Observed by the cardiologist



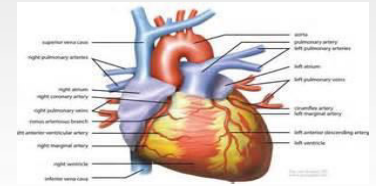
Surgeon with the additional eyes



Types of Heart Surgeries

- **Coronary Artery Bypass Grafting**
- **Heart Valve Repair or Replacement**
- **Surgical Treatment for Arrhythmias**
- **Aneurysm Repair**
- **Heart Transplant**
- **Surgery To Place Ventricular Assist Devices or Total Artificial Hearts**

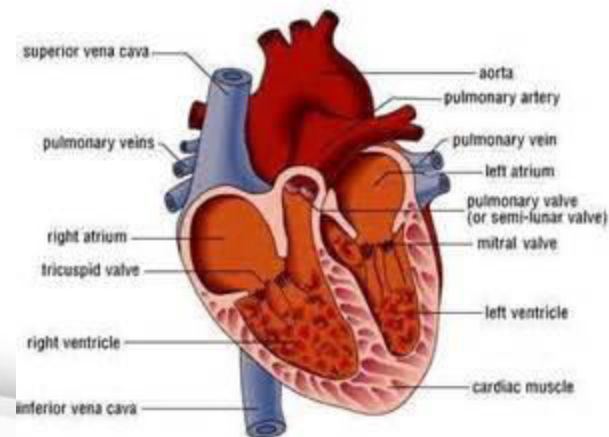
Which patients are really in need of cardiac surgeries?



- All patients with congenital heart defects
- All patients with valve dysfunction not manageable with medicines
- All patients with coronary artery disease....with significant stenosis
- Few end stage heart disease patients not responding to medicines, **VAD and ECMO**

Is cardiac surgery fatal or life saving?

- All you great and committed doctors play a major role in making the patient attendants acceptable for cardiac surgery

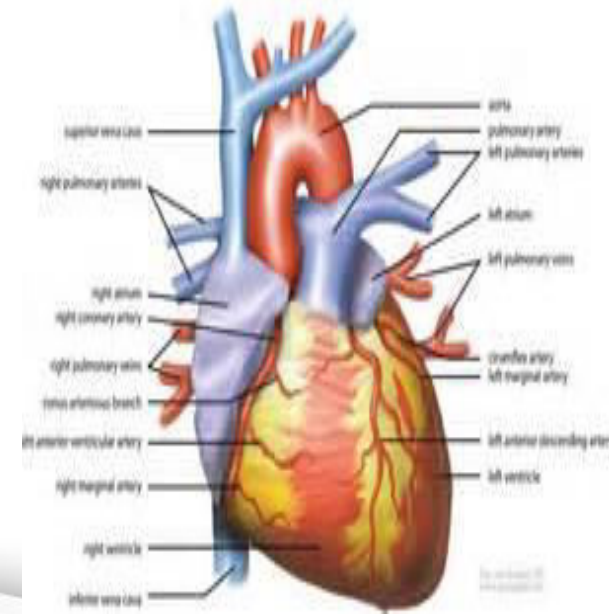


Modifications in conventional

- 1953 first successful open heart surgery using CPB

Late 1990's introduction of OPCAB

Approximately 2012 MICS



Conventional Cardiacsurgery



All the surgeries we perform to increase the **quality of life** of your and our patients

** ASD closure

** VSD closure

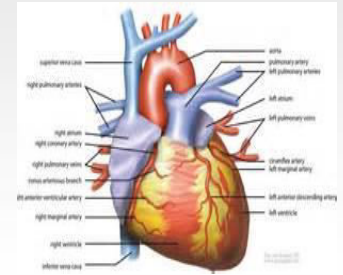
**CABG

** valve replacement – MVR ## AVR

** Complex congenital cardiac disease

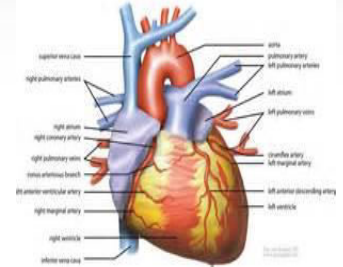
What is the difference?

- Why should we prefer MICS to the patient?
- Who all can be operated?
- IS MICS effective?



What are the requirements for MICS?

- Surgical expertise
- Needy patient
- Motivated referral physicians
- Equipment
- Acceptance from the patient .

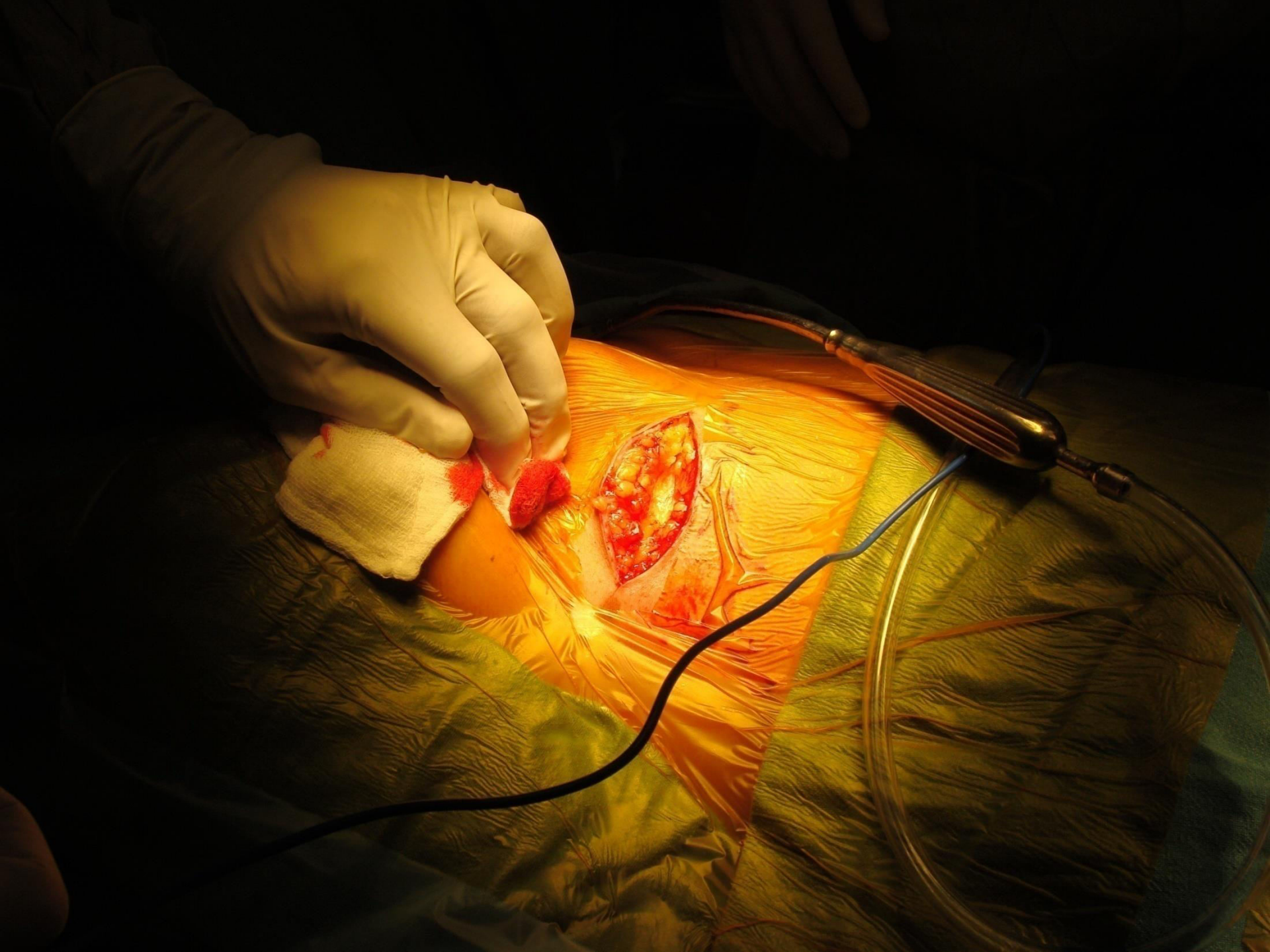


Patient immediate post operative state

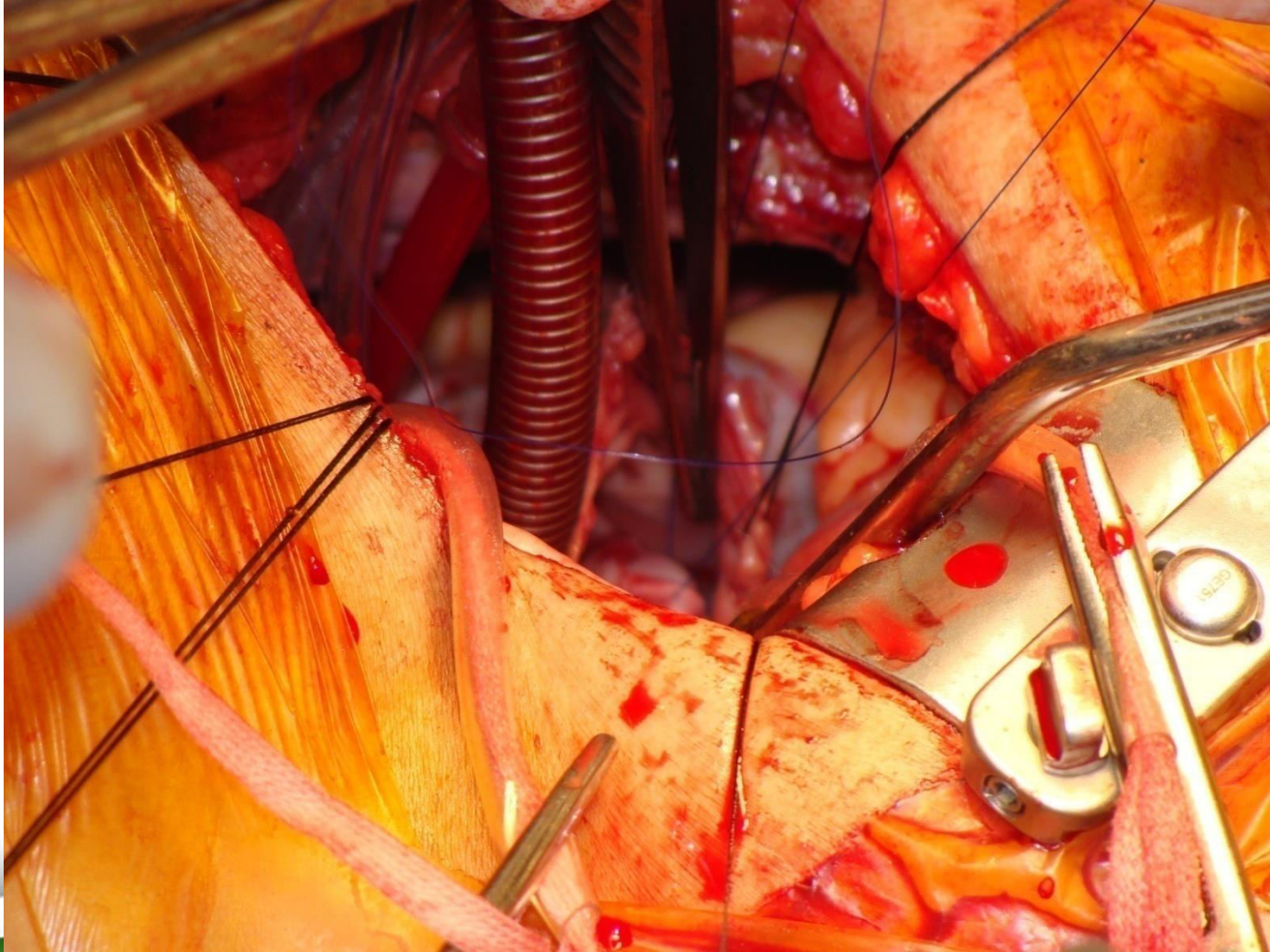


MICS technique

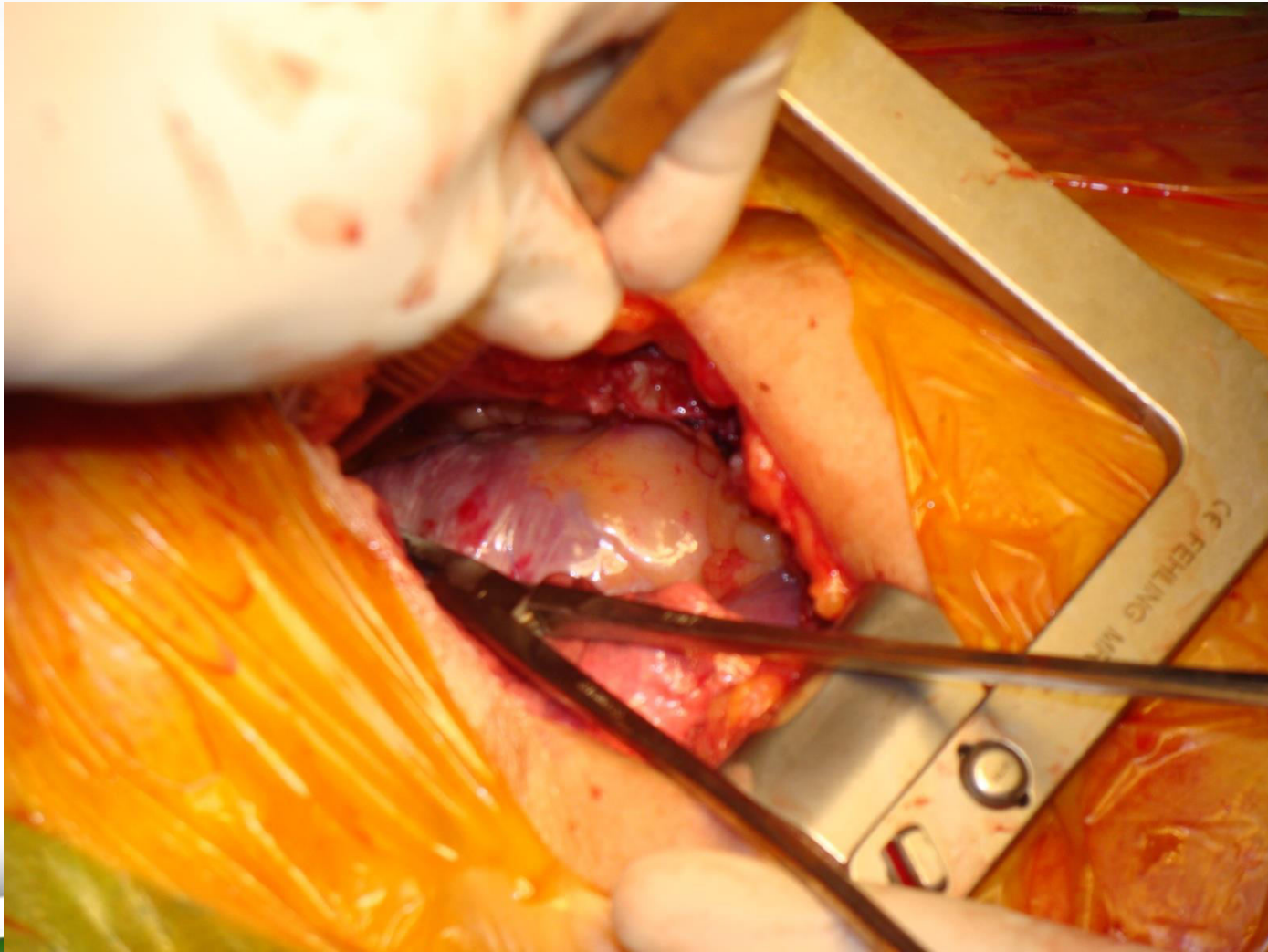




MICS opened RA



Retractor in position



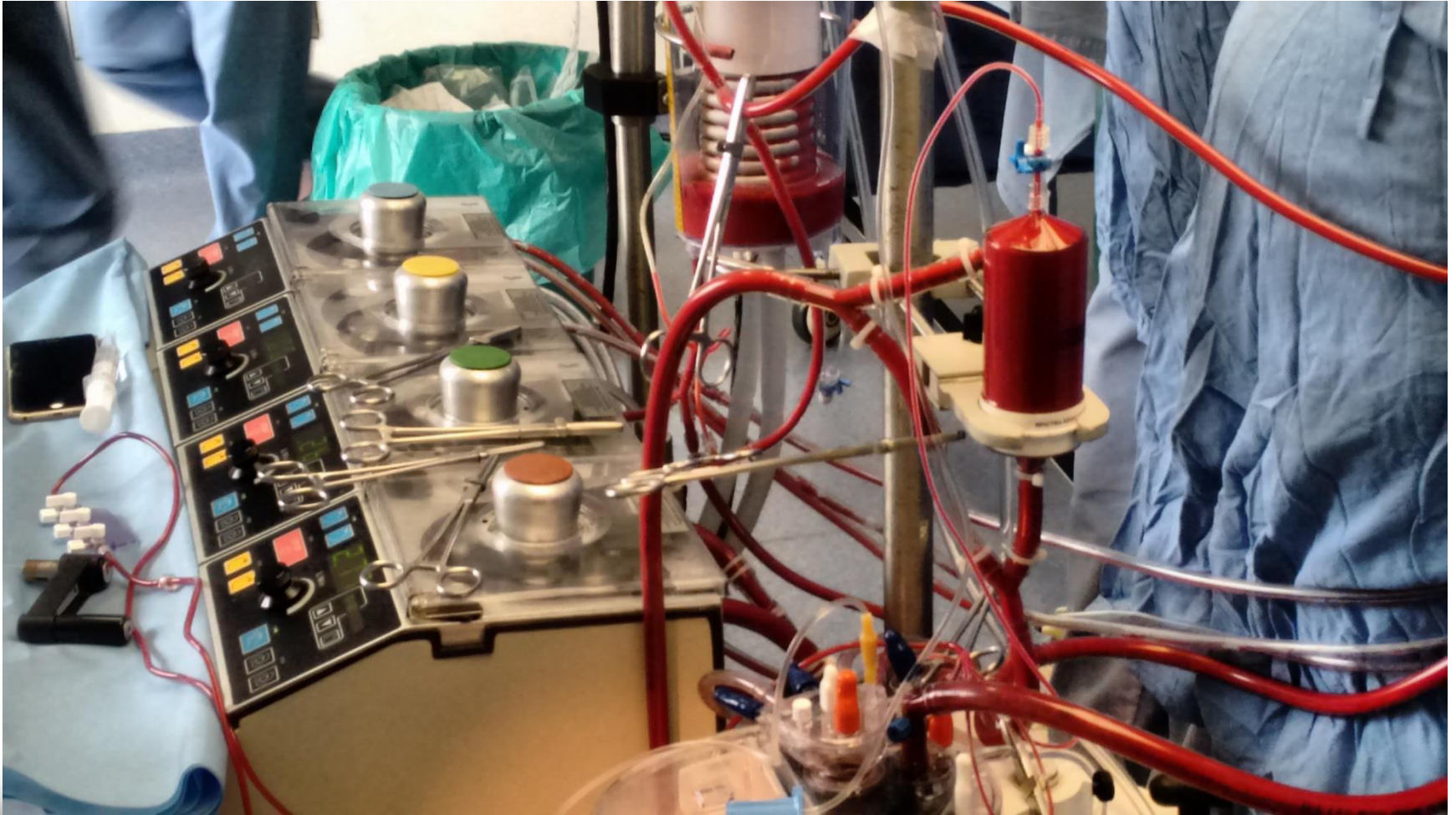
First MICS at Nellore



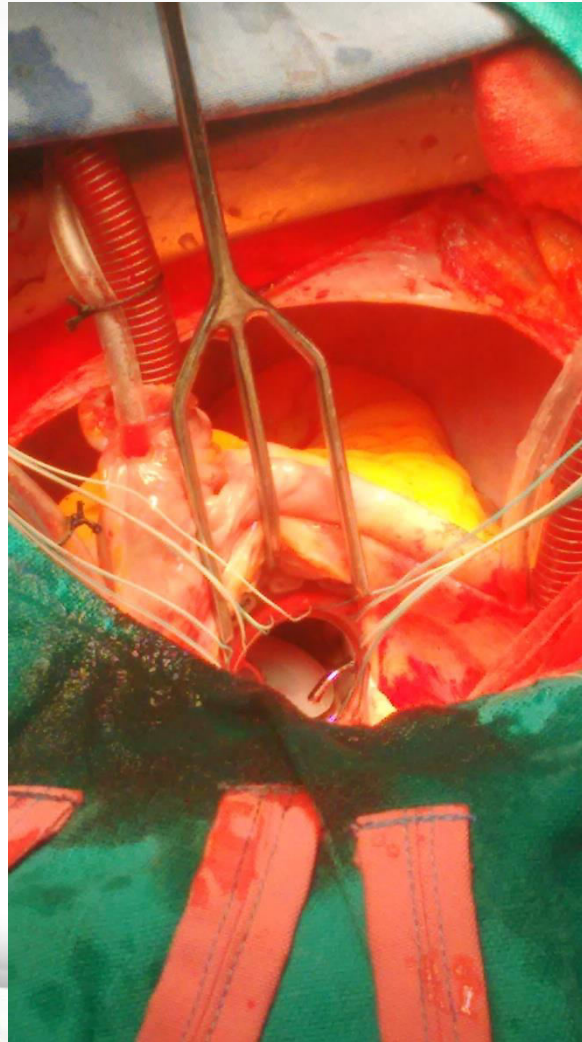
Second MICS patient at Nellore



Heart and Lung Machine (CPB) machine

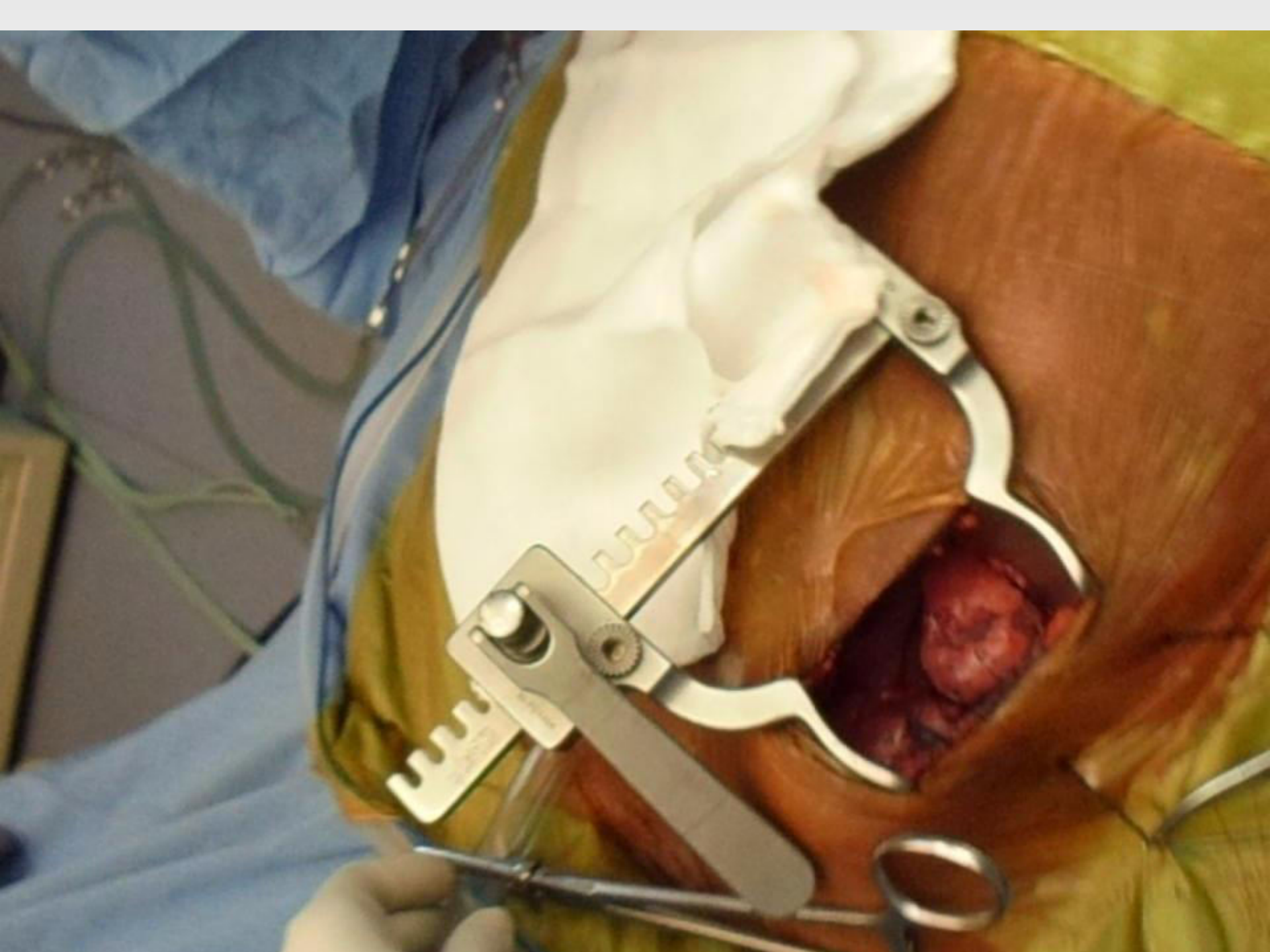


Mechanical Valve in situ



- heart as seen through the MICS incision

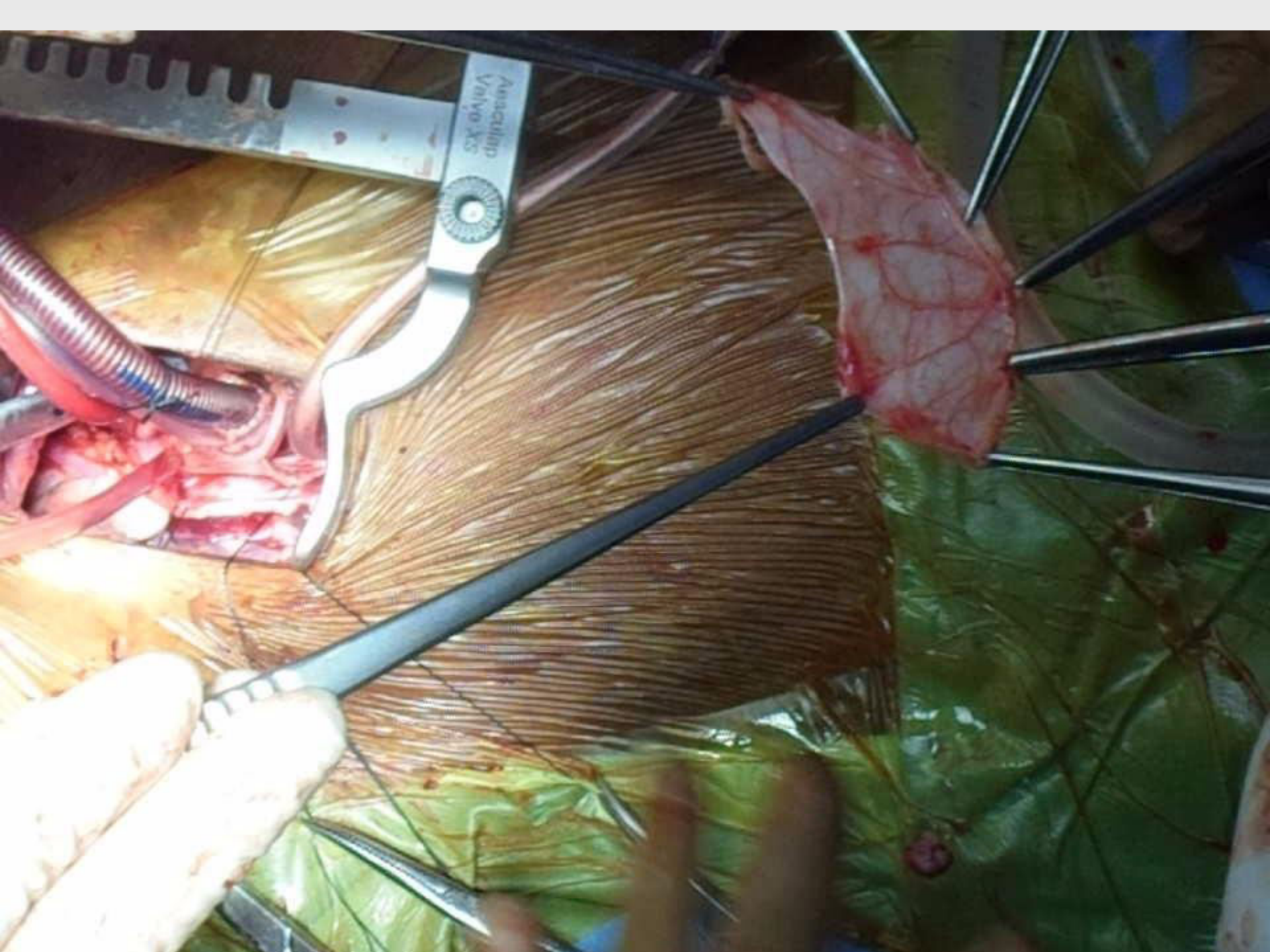


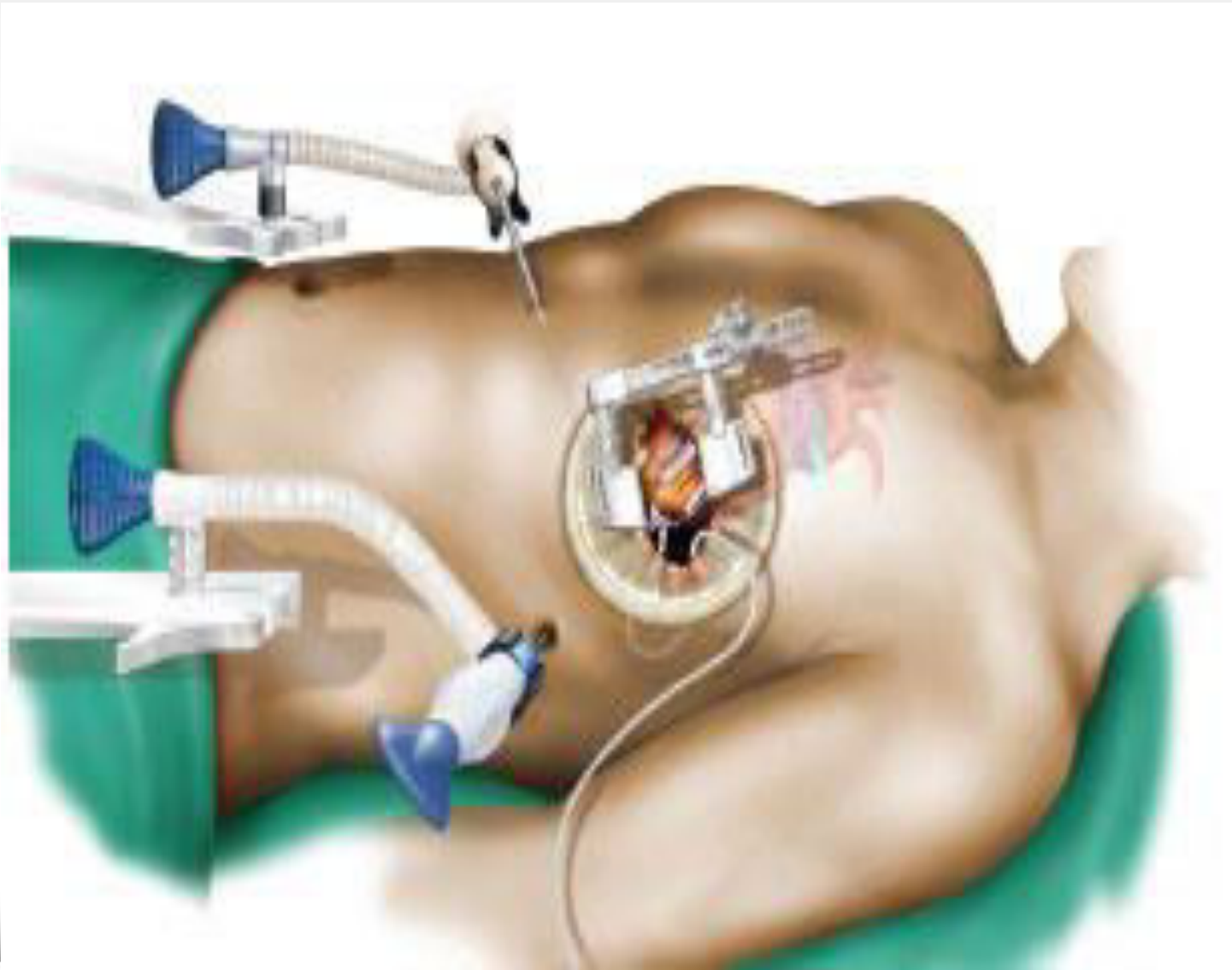


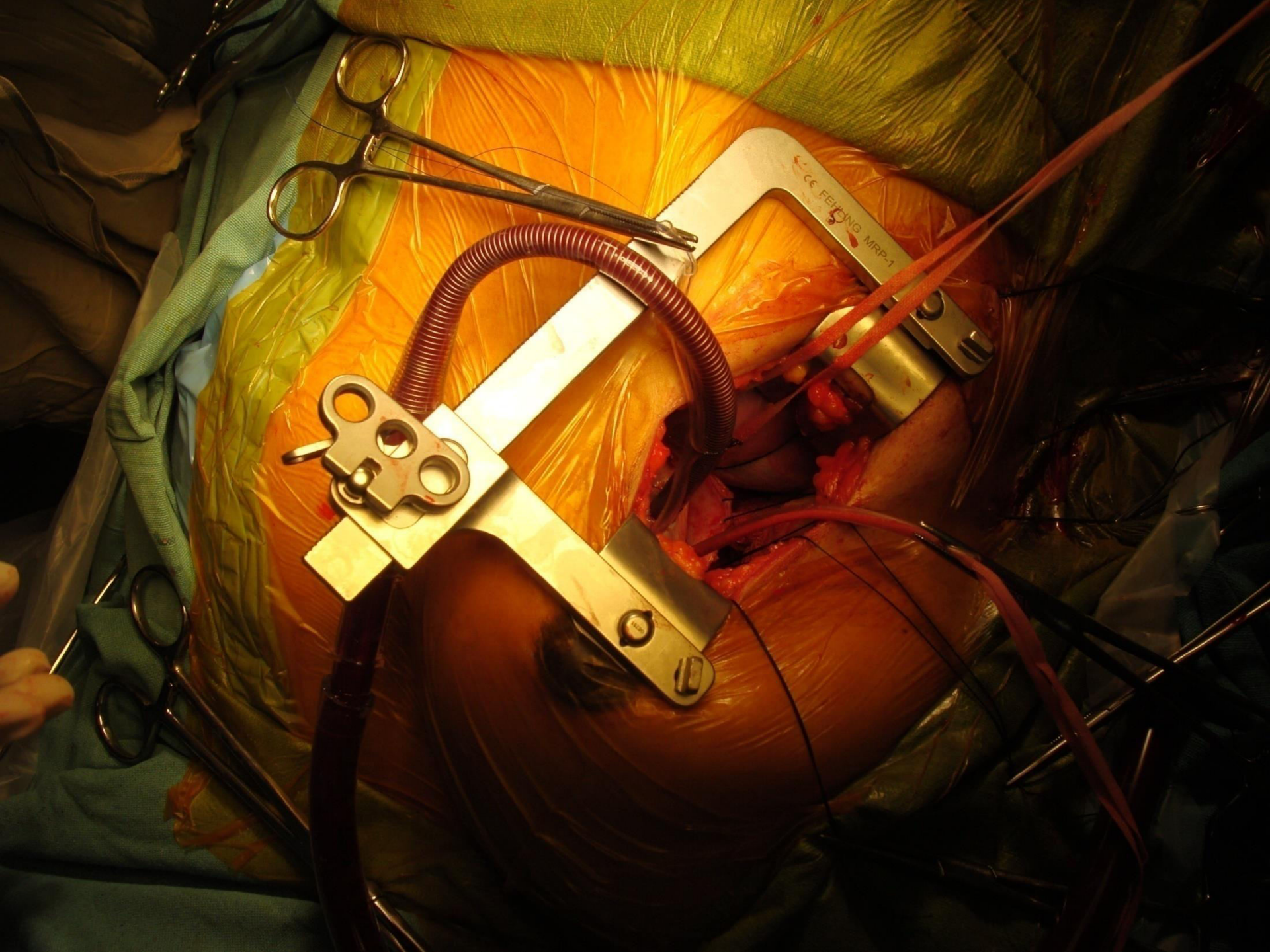
How do you close the Atrial Septal Defect ?

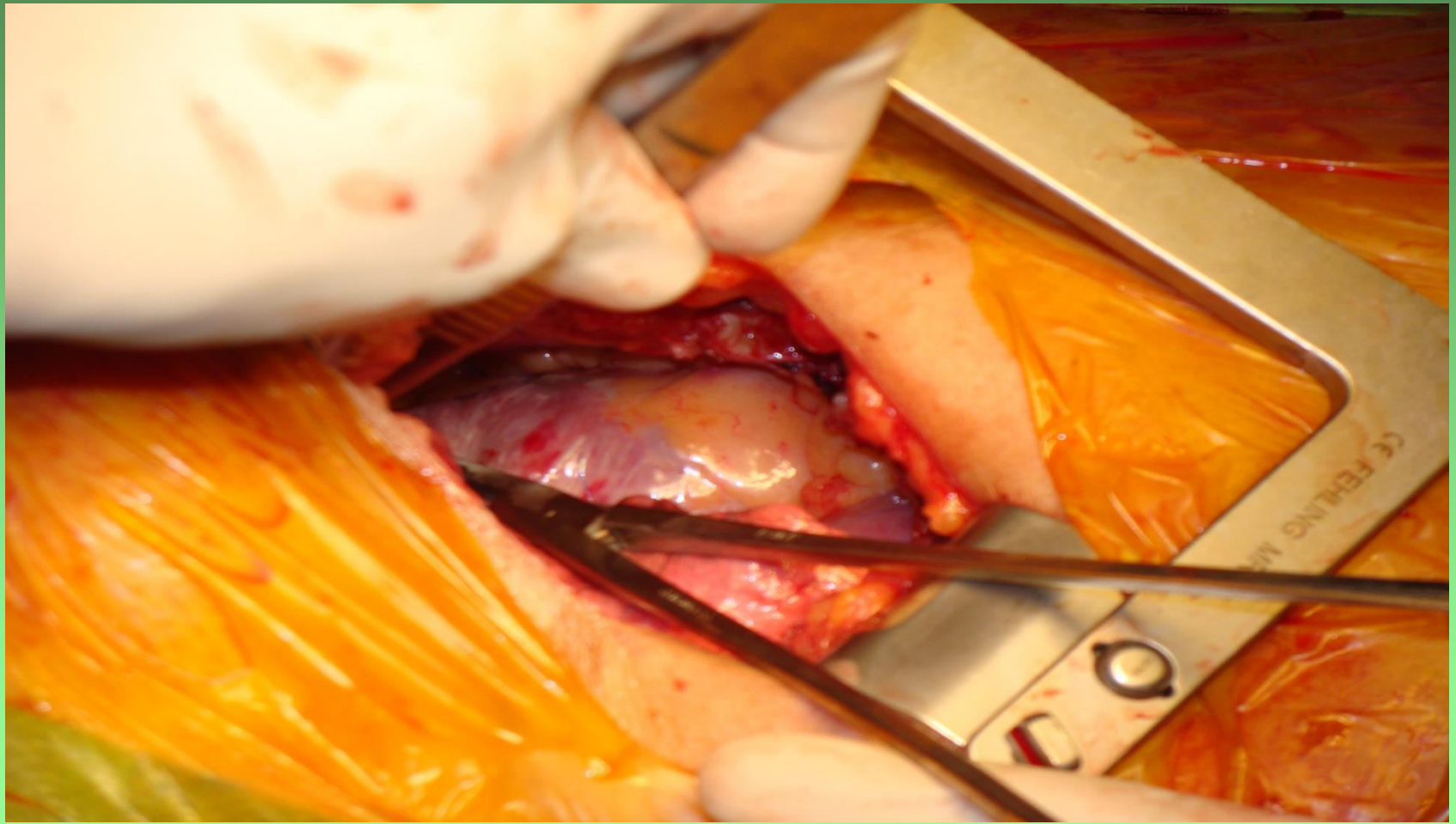
Autologous Pericardial Patch



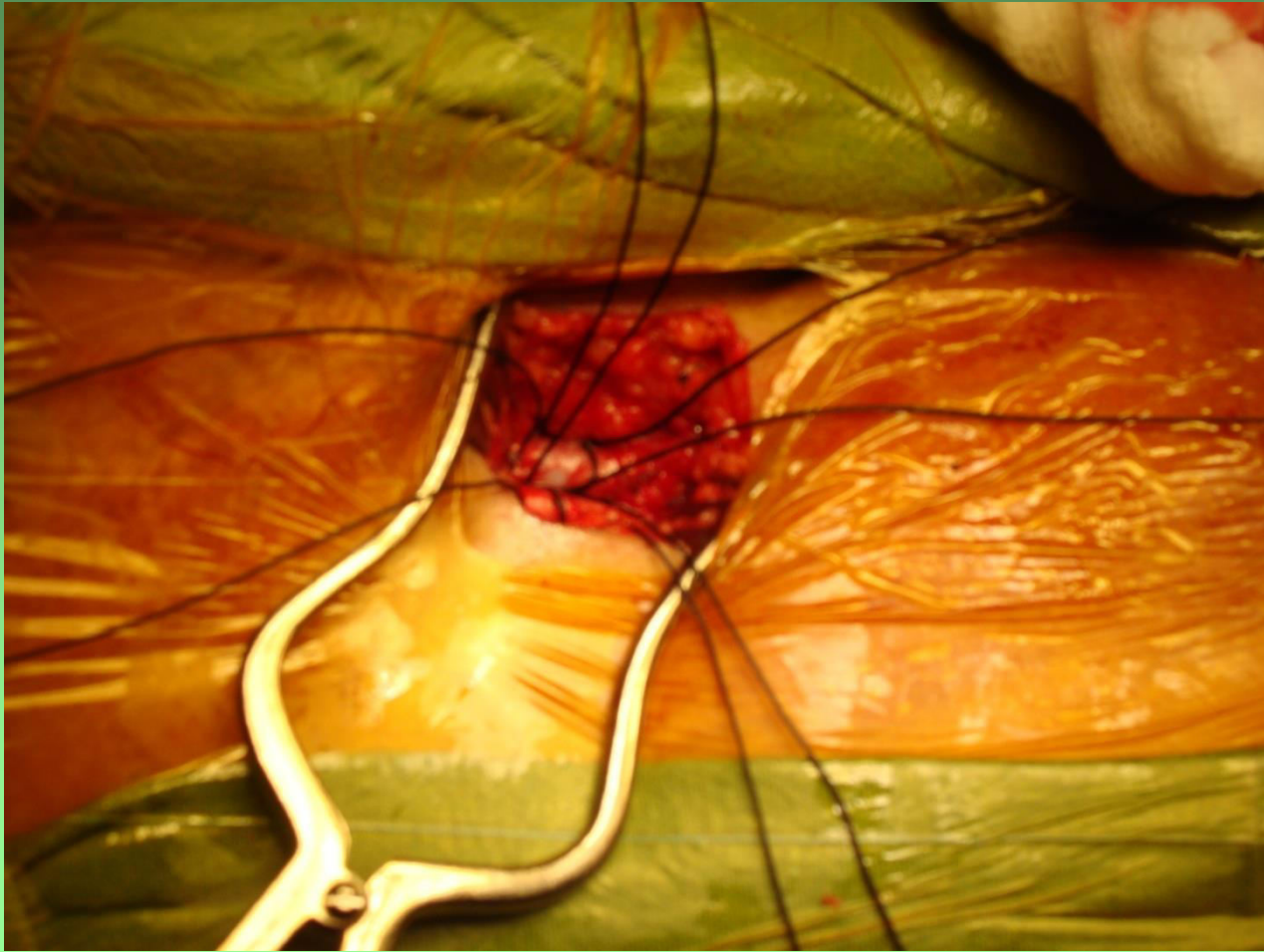


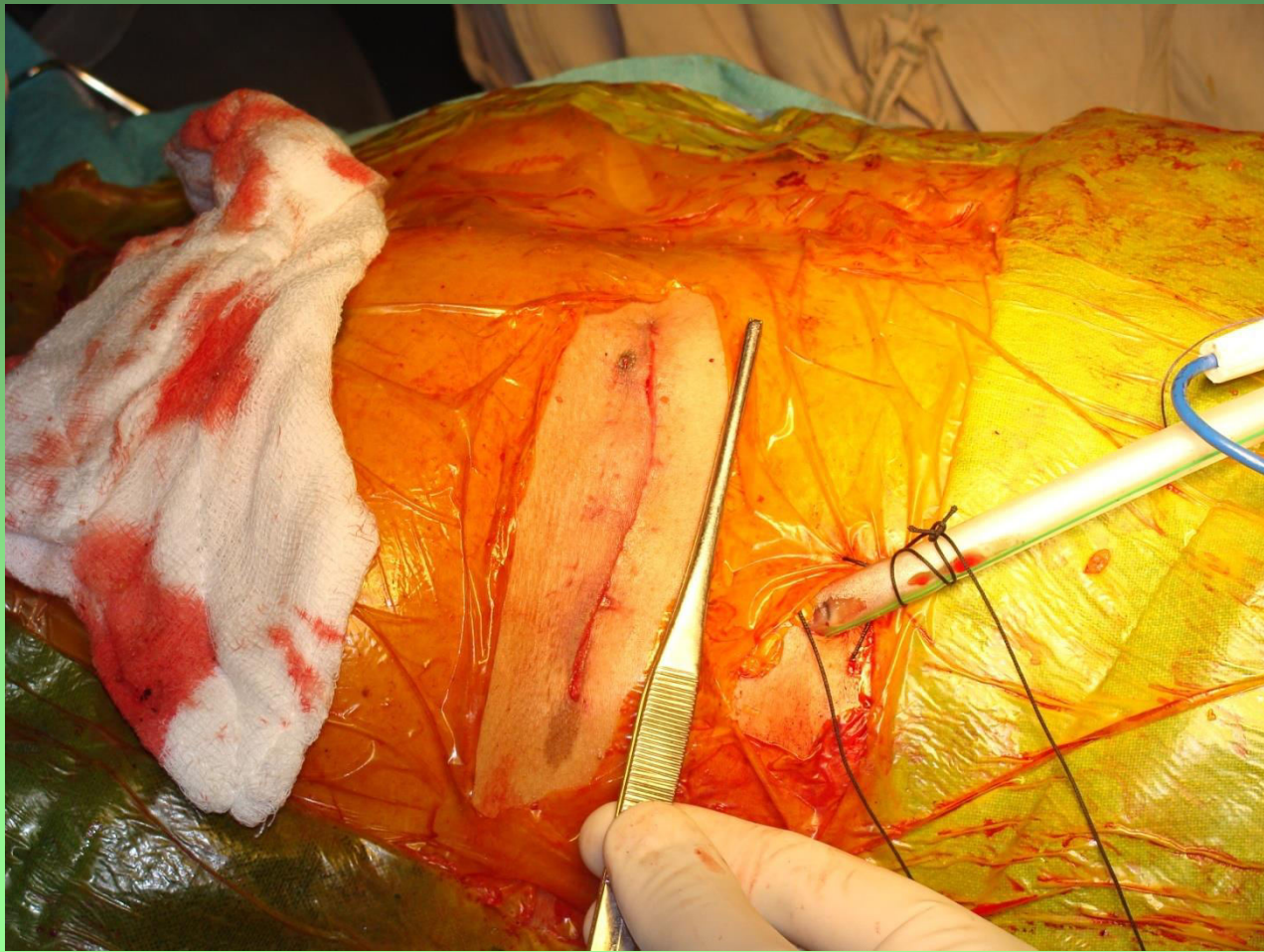






Exposure of the femoral vessels





Where is the scar ?







Thank You

