

Chapter 1

HEART SURGERY

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► Operations in Open Heart Surgery

The emergence of anesthesia in the nineteenth century as a discipline and the advances in cardiology in the twentieth century also led to the development of cardiac surgery. Interventions to the heart in the nineteenth century were only for cardiac suture procedures. The presence of heparin and heart lung device in the twentieth century was the turning point in heart surgery. Heart surgery; has shown quite improvement with the diversity in the field of application as surgical treatment.(Picture 1)

Some of the commonly performed cardiac surgeries are as follows:

- Coronary Artery Bypass Surgery
- Mitral Valve Surgery
- Aortic Valve Surgery
- Ascenden Aort Surgery
- Tricuspid Valve Surgery
- Infective Endocarditis Surgery
- Arrhythmia Surgery
- Myxoma Surgery
- Congenital Cardiac Surgery
- Heart Transplantation Surgery

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Problems that may be encountered

- **Airway Problems:** Endotracheal tube removal, adequate ventilation of the patient.
- **Monitorization Problems:** Inability of the patient to be monitored effectively or the potential negative hemodynamic status cannot be noticed.
- **Drug Infusion Problems:** Hemodynamic impairment due to drug infusion interruption or accidental overdose.
- **Seperation of the Venous Access.**

Considerations in Transport Period

- Portable monitorization must be performed: Electrocardiography (ECG), saturation probe, arterial blood pressure monitorization
- Oxygen tubes, transport ventilator, balloon - mask device should be checked
- Drug infusion pumps should be controlled
- Endotracheal tube, laryngoscope, neuromuscular blockage and emergency resuscitation drugs should be available during transfer

What should be done during the patient's transfer to the Intensive Care Unit

- Connect the patient to the mechanical ventilator
- Ventilation of both lungs should be checked
- Infusion medications should be checked and reported to the personnel who are going to do the intensive care follow-up
- Information about the patient's peroperative problems should be given to intensive care doctor
- Arterial blood gas should be removed after transport and medications should be ordered and mechanical ventilation parameters should be setted according to the arteial blood gas measurements, if needed

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