Lung transplantation is the most advanced treatment option introduced recently in Egypt for patients with end-stage lung disease that failed to respond to conventional medical therapy.

The native diseased lung or lungs are removed from the recipient through a thoracotomy incision either for single lung or sequential double lung transplant surgery, while the donor lobe being harvested from a living donor who is matched to the recipient based solely on gross anatomic size and primary blood group typing. The flushed donor lobe is placed in the chest in the normal anatomic position and is then attached to the recipient by three anastomoses one for the bronchus, one for the pulmonary artery and one for the pulmonary veins.

Anesthetic considerations: preoperative evaluation and preparation

Patient presenting for LT fortunately has adequate time to evaluate the medical condition. It is also crucial to ascertain the baseline functional status of the recipient. Sedation can produce hypotension by decreasing the effect of circulating catecholamines. Thoracic epidural catheter (T6–T8) should be placed before induction. These patients are at risk for postinduction hypotension resulting from decreased cardiac output from hypovolemia, vasodilation, and negative inotropic effects from the induction agents; maintain a mild tachycardia which is often helpful to preserve cardiac output. Single-lung ventilation will be required. And always confirmed by fiberoptic bronchoscopy we usually follow the guidelines for thoracic anesthesia as regards monitoring and anesthetic drugs, the role of TEE is crucial in hemodynamic assessments.

At the end of surgery an attempt to extubate patients is done in the operating room or shortly after arrival in the ICU.