



**DEPARTMENT OF ANAESTHESIOLOGY,  
PAIN AND PERIOPERATIVE MEDICINE  
SIR GANGA RAM HOSPITAL, NEW DELHI, INDIA**

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**Liver Transplant Fellowship  
Teaching Programme**

**I. Lectures**

1. Physiology of liver
2. Anatomy of liver
3. Liver function tests
4. Drugs affecting liver function
5. End Stage liver disease
6. Fulminant hepatic failure
7. Pre operative assessment for Liver transplant recipient
8. Pre operative preparation for transplant recipient
9. Hepatorenal syndrome
10. Hepatopulmonary syndrome
11. Portopulmonary hypertension
12. Scoring systems for assessing severity of liver disease
13. Anaesthetic management for liver transplant recipient
14. Veno Venous bypass
15. Haemodynamic monitoring in liver transplant
16. Coagulation assessment during liver transplant
17. Continuous renal replacement therapy intraoperatively
18. Anaesthetic management for donor hepatectomy
19. Post operative analgesia for donor hepatectomy
20. Post operative care of donor hepatectomy
21. Post operative care of liver recipient
22. Coagulation disturbances in liver transplant recipients
23. Post operative complications in liver transplant recipients
24. Immunosuppressant – primary & secondary

## **II. O.T. Procedures**

1. Central line insertion
2. Arterial canulation
3. Pulmonary artery catheterization
4. Ultrasounded vascular access
5. Thromboelastography
6. Blood gas analysis
7. Lithium dilution cardiac output monitoring
8. Pulse contour derived haemodynamic parameters

## **III. Preoperative rounds**

1. Three times a week - Monday, Tuesday and Thursday - subject to change
2. To assess patient for liver transplant the subsequent day
3. To plan the anaesthetic for donor and recipient

## **IV. Combined pre transplant meetings**

1. These meetings are attended by surgeons, hepatologists and the anaesthesiologists to discuss the patients coming up liver transplant in the next few days with a view to plan and optimally prepare for the transplant
2. Monday and Thursday at 4:00 p.m. in Room No. 2221
3. Additional meetings if required

## **V. Operation Theatre**

1. Tuesday 6:00 a.m. / 8:00 a.m.
2. Wednesday 4:00 p.m.
3. Friday 6:00 a.m. / 8:00 a.m.
4. Emergency transplant - Any other time

## **VI. Post operative rounds**

Daily 8:00 a.m. Liver Transplant ICU, 5<sup>th</sup> floor, SSR Block

## **VII. On Call for Liver Intensive Care Unit**

Postoperative management of liver donor and recipient under the guidance of consultant anaesthesiologist. All recipients are kept in Liver Intensive Care Unit post operatively. Majority of transplant recipients are ventilated for a variable length of time. The length of stay in Intensive Care is variable from 3 days onwards depending on the individual patient.

The donor is kept in the Liver Intensive Care Unit. If there is no space available, then the donor is managed in the Postoperative Intensive Care Unit, which is in close proximity of Liver Transplant ICU.

## **VIII. Research activity**

Fellows will be involved in research activity and will be expected to present / publish clinical study.

## **IX. “Hands on” Training**

‘Hands-on’ training will be allowed under the supervision of the consultants of the liver transplantation anaesthesia team.

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- On completion of their tenure, they shall be assessed by a theory and practical exam by the Consultants in the specialty.