CURRICULUM AND SYLLABUS TRANSPLANTATION

Module 1: Multi-organ retrieval

Subject objective

Ability to evaluate donor suitability
Ability to retrieve abdominal organs for transplantation

Knowledge

Evaluation of donor/ organs suitability (including non heart beating donors)
Contraindications to organ donation: general, organ-specific
Criteria for brain/ brainstem death
Pathophysiology of brain/ brainstem death
Principles of donor management and organ preservation
Surgical anatomy of multi-organ retrieval
Donor transmitted diseases

Clinical skills

Assessment and management of organ donors (including live and non heart beating donors)
Kidney retrieval from deceased donor
Liver retrieval from deceased donor
Pancreatic retrieval from deceased donor
Kidney retrieval from live donor

Professional Skills

Check, record and retrieve relevant information from donor medical records
Communication
Teamwork
Ability to act in a multi-disciplinary environment
Understand ethical and medical-legal issues in organ donation and organ allocation
Module 2: Kidney transplantation

Subject objective

Ability to assess patients for renal transplantation and manage their care

Knowledge

Acute and chronic renal failure: causes, complications, pathophysiology, treatment options
Anatomy: implantation site, kidney anatomy (including variations and anomalies)
Immunology: ABO compatibility, cytotoxic cross match, flow cytometry, HLA matching, immunosuppression, rejection
Indications and contraindications for: deceased and live kidney donation and transplantation
Principles of pre-op preparation and post-op management
Principles of organ allocation

Clinical skills

Evaluation of donor/ organ suitability (including non heart beating donors)
Select appropriate patient from the waiting list
Kidney retrieval from deceased donor
Kidney retrieval from live donor
Kidney transplantation: bench preparation, prepare implant site, perform vascular and ureteric anastomoses
Manage post-op care: drug therapy, fluid management, laboratory and imaging investigations, renal biopsy
Identify and treat post-op complications: drug side effects, infection, rejection, vascular and ureteric complications
Post-transplant graft nephrectomy
Vascular access experience or attendance of training course, vascular surgery experience or attendance of training course, microsurgery experience or attendance of training course

Professional skills

Assess patients referred for kidney transplantation (including live donors): arrange appropriate investigations, counsel patients and families and obtain informed consent, prepare patients for theatre
Demonstrate diagnostic, prescribing and counselling skills, good communication and teamwork.
Practise evidence-based medicine: audit, clinical trials, journal review
Ability to act in a multidisciplinary environment
Understand medico-legal and ethical issues
Record and retrieve information from databases
Module 3: Pancreas transplantation

Subject objective

Assessment of patients for pancreatic transplantation in consult with a multidisciplinary team
Operative management and post operative care

Knowledge

Diabetes: causes, complications, pathophysiology, treatment options (including islet transplantation)
Indications and contraindications for pancreatic donation:
simultaneous kidney and pancreas transplant, pancreas after kidney transplant, pancreas transplantation alone
Anatomy: pancreatic graft and implantation site
Immunology: ABO compatibility, cytotoxic cross match, flow cytometry, HLA matching, immunosuppression, rejection
Principles of pre-op preparation and post op-management
Knowledge regarding kidney transplantation

Clinical skills

Evaluation of donor/ organ suitability (including non heart beating donors)
Pancreatic graft retrieval
Select appropriate patient from the waiting list
Pancreatic graft bench preparation and implantation
Manage post-op care: drug therapy, fluid management, laboratory and imaging investigations, pancreatic graft biopsy
Identify and treat post-op complications: drug side effects, infection, rejection, vascular complications, pancreatic fistula, graft pancreatitis,
Post transplant graft pancreatectomy

Professional skills

Assess patients referred for pancreas transplantation: arrange appropriate investigations, counsel patients and families and obtain informed consent, prepare patients for theatre
Demonstrate diagnostic, prescribing and counselling skills, good communication and teamwork.
Practise evidence-based medicine: audit, clinical trials, journal review
Ability to act in a multidisciplinary environment
Understand medico-legal and ethical issues
Record and retrieve information from databases
Module 4: Liver transplantation

Subject objective

Assess and manage patients undergoing liver transplantation

Knowledge

Acute and chronic liver failure: causes, complications, pathophysiology and treatment options
Immunology: immunosuppression, rejection
Indications and contraindications for: deceased and live liver donation, liver transplantation and re-transplantation
Liver anatomy: anatomical variants, surgical anatomy for splitting/reduction/live donation
Principles of pre-op preparation and post-op management
Complications of liver transplantation and their management

Clinical skills

Evaluation of donor/organ suitability (including non heart beating donors)
Select appropriate patient from the waiting list
Deceased donor liver retrieval
Split liver procedure
Deceased donor liver transplantation including: bench work preparation, common intra-operative challenges and variations
Split liver transplantation or attendance of training course
Manage post-op care: drug therapy, fluid management, laboratory and imaging investigations, liver biopsy
Identify and treat post-op complications: drug side-effects, infection, rejection, vascular complications, biliary complications, recurrent disease, hepatitis

Professional skills

Assess patients referred for liver transplantation: arrange appropriate investigations, counsel patients and families and obtain informed consent, prepare patients for theatre
Demonstrate diagnostic, prescribing and counselling skills, good communication and teamwork.
Practise evidence-based medicine: audit, clinical trials, journal review
Ability to act in a multidisciplinary environment
Understand medico-legal and ethical issues
Record and retrieve information from databases