Guidelines for Patient Care after Heart Transplantation

Dr N R Banner for:
ISHLT Heart Failure and Transplant Council in association with the Pediatric Council
The process

- Proposal ✅
- Topic planning ✅
- ISHLT Board approval ✅
- Topic leads ✅
- Volunteers
- Topic groups
- Writing process
  - Assignments
  - Email submissions
  - Conference calls
  - Requests for revision
  - Topic coordination
- Final conference before 2009 Annual Meeting (Paris)
TOPIC 1: Early postoperative care

Leads:
- Maria Rosa Costanzo
- Randall Starling
- Robert Bonser
- TBC
• Continuous hemodynamic monitoring and availability of transesophageal echo – early recognition of the complications that may occur after heart transplantation e.g. primary graft failure and right ventricular failure, either as a manifestation of PGF or secondary to an increased PVR.
• Donor and operative factors that may impact post-operative management
• Pharmacological Therapies in the Early Postoperative Period:
  – Inotropes.
  – Role of nitric oxide
  – Management of Volume Status and Hemodynamics
  – Metabolic management (Acidosis, glycemic management),
• Non-Pharmacological Therapies in the Early Postoperative Period
  – Pacing.
  – Crucial role of renal function as indication of an adequate circulation, indications for the use of hemofiltration and other RRT.
  – Use of VADs to manage PGF
• Documentation and communication within the multidisciplinary team.
• Role of therapeutic targets
• The use of ECMO to treat primary graft failure in pediatric heart transplantation.
• Other ‘surgical’ complications, hemorrhage, tamponade
• Coagulopathy
• Cross match results and hyperacute rejection (HLA and ABO incompatibility)
• Management of ABO ‘incompatible’ pediatric transplants (inc. blood products)
Topic 2: Immunosuppression, rejection and infection

Leads:

• Nicholas Banner
• David Taylor
• Bruno Meiser
• Steve Webber
Scope of Topic 2

- Role of the endomyocardial biopsy in the diagnosis of acute rejection (clinically indicated and routine surveillance).- mention both ISHLT grading systems
- Pediatric considerations related to endomyocardial biopsy
- Current status of non-invasive methods of screening for rejection. Assessment of emerging methods for the diagnosis of rejection (sensitivity, specificity, etc...)
- Pharmacology of immunosuppressive agents.
- Pharmacokinetics of immunosuppressive agents and relevant drug interactions – inc. special situations e.g. HIV infection
- Principles of immunosuppression and recommended regimens based on information from clinical trials.
- What is the role of induction therapy?
- Role of statins as adjunctive immunosuppressive agents and as prophylaxis against CAV.
- Management of acute rejection (ACR and AMR).
- Late acute rejection.
- Prophylaxis against infection e.g. CMV, pneumocystis and toxoplasmosis.
- Diagnosis and management of infections (nosocomial, community, opportunistic, chronic).
Topic 3: General care and management of other complications

Topic leads
• Edoardo Gronda
• Barry Rayburn
• Mandeep Mehra
• Michael Burch
Scope of Topic 3

- Approaches to drug withdrawal/dose minimization/sequential therapies to minimize toxicity
- Management of specific toxicities e.g. nephrotoxicity and neurotoxicity.
- Cardiac allograft vasculopathy (angiography, IVUS, non invasive testing, lipids and risk factor modification, alternative immunosuppression strategies).
- Malignancy (skin, PTLD, other – role of immunosuppression per se and effects of specific agents).
- Chronic kidney disease - investigation and management – when to involve the nephrologist
- Post-transplant diabetes mellitus.
- Other Complications of Chronic Immunosuppression (for example myopathy from chronic steroid therapy) – effect of steroids on growth in children
- Post-transplant hypertension.
- Prophylaxis against steroid induced bone disease
- Approach to patients who are already on ‘obsolete' immunosuppressive agents such as azathioprine.
- Sexual health (including erectile dysfunction and pregnancy).
- Recommendations for rehabilitation and Prescription for Exercise
- Management of intercurrent surgery in the heart transplant patient (pre-operative assessment, handling immunosuppression, antibiotic prophylaxis, steroid dependence).
- Return to work, occupational restrictions
- Licensing for driving a motor vehicle (private and occupational)
- When should prophylaxis against infective endocarditis be used for dental and other procedures?
- Indications and special considerations for re-do Heart Transplantation.
- Recommendation of frequency of routine tests and clinic visits
- Psychological issues particularly related to adherence to drug therapy.
- Managing the transition from pediatric to adult care
- Principles of shared care with referring cardiologist or family physician
Introductory article

• Easily readable summary of the detailed information contained in the following articles written by the lead authors for the 3 topics.
• Emphasis of summary tables, algorithms and charts
• No references needed (evidence in subsequent articles)
• Usable by all health care professionals
• Suitable to adapt as a pocket guide (could be reprinted using money from a sponsor)
Who should volunteer?

• Knowledge and expertise
• Motivation
• Commitment to 1-year process
• Time available

To volunteer email: n.banner@bht.nhs.uk BEFORE April 21 2008

• Task force for each topic will be selected by topic leads on basis of the contribution that each individual can make