Pediatric Infectious Disease Program for Immunocompromised Hosts
PIDPIC

Hayley Gans and Sharon Chen
Meetings

• Roll out starting in Sept
  – Presented at Transplant Quality meeting: 9.23
  – Met with Rheumatology, GI and SCT during 9-10
• Started weekly working group meetings since 10.13
  – To discuss priority issues and develop draft protocols
• Updating individual groups
  – Cardiology, GI, Renal (scheduled)
Protocol Drafts-Respiratory Viruses

• Influenza:
  – All pretransplant patients > 6mo
    • TIV or LAIV
  – All posttransplant patients > 6mo
    • TIV
    • 2 doses first season after transplant regardless of age
  – All family members > 6mo
    • Preference given to TIV but LAIV not contraindicated
Protocol Drafts-Respiratory Viruses

• RSV Prophylaxis
• Background
  – Severe disease and increased incidence of rejection in SOT recipients
• Forty-nine percent (33/67) of transplant programs reported using RSV prophylaxis
  – Unpublished data shows infection with RSV was reported in 4/109 (4%) SOT recipients who received prophylaxis and in 22/195 (11%) children who received SOT but did not receive prophylaxis (p = 0.03). Michaels, et al Pediatr Transplantation 2009: 13: 451–456
RSV Prophylaxis

- Recommended for high risk groups
  - Infant and children < 24mo
  - Immediate posttransplant

- Recommended monthly synagis (Nov-Mar) for:
  - Candidates < 24 mo
  - Posttransplant < 24 mo
RSV prophylaxis

• Who would qualify: 30 patients
  – Heart: 2 pretransplant, 6 posttransplant
  – Liver: 3 pretransplant, 17 posttransplant
  – Renal: 1 pretransplant
  – SB/Liver: 1 pretransplant

• Started to test the logistics and insurance
  – CCS no issue
  – Private pay, mostly no issue
  – Kaiser: split
Protocol Drafts-Respiratory Viruses

• **Preemptive measure for all listed patients:**
  - Check-ins to the families to assess for symptoms, reminder for parents to call for any symptoms
  - May be feasible in EPIC with questionnaires
  - Education to families to call with any symptoms indicating that it may not impact transplant and best to identify if possible which virus to target treatment

• **Preventive strategies for all listed patients and donor recipients**
  - Flu vaccine and palivizimab (see protocols)
RSV and Parainfluenza

• Recipient
  – If symptomatic and requiring hospitalization: Inhaled ribovarin before transplant and IVIg (400mg/kg) after transplant x1
  – If symptomatic and not hospitalized no interventions, if transplant becomes available and still symptomatic, IVIg and ribovarin if feasible:
  – if no symptoms at time of organ offer, no intervention

• Donor positive
  – no interventions
Respiratory Viruses

• **Rhinovirus and Human MetaPneumovirus**
  – Recipient: If symptomatic: before and after transplant IVIg (400mg/kg) x1
  – Donor positive, no interventions

• **Influenza**
  – Recipient: If symptomatic: oseltamivir (5 days can straddle transplant)
  – Donor positive: start oseltaminr in donor and finish a total of 5 day course in recipient
Respiratory Viruses

• Adenovirus: delay transplant
• If no time to test and identify the infecting organism and patient symptomatic, send respiratory PCR and give IVIg 400mg/kg

• Symptoms are objective evidence of URI/LRI no fever. ? CXR pretransplant?
Tuberculosis

• All organ recipient candidates should be screened for tuberculosis
  – For children <5 years of age preferred screening is with PPD
  – For children 5-18 years preferred screening is with PPD but IGRA acceptable

• If Tb screening test is positive:
  – Referral to Peds ID
Tuberculosis

• All organ recipients who are found to be TB screen positive should be referred to Peds ID for evaluation and treatment.
  – Screening should include both PPD and QF to increase sensitivity