Empiric Treatment of Suspected Hospital-Onset Infection in Pediatric Patients with Acute Liver Failure or Early Post-Liver Transplantation

Applies to non-neonatal patients with acute liver failure > 48 hours into hospitalization and/or pediatric patients < 2 months s/p liver transplantation (for any indication)

Initial Evaluation: Obtain cultures before antibiotics when Pediatric Hepatology service should be possible consulted if not already aware of patient Additional evaluation should be Physical examination considered based on patient Blood culture - all CVC lumens + peripheral characteristics + focal signs/symptoms See separate algorithm for U/A with reflex to culture neonatal and pediatric patients ID consult recommended for: with suspected infection at If respiratory signs/symptoms: - Severe/evolving presentation initial evaluation for Endotracheal aspirate if intubated - Evaluation for opportunistic infection if acute liver failure > 1 month post-transplant or with Chest X-ray Consider respiratory virus testing previous transplant See separate algorithm for - Evaluation for donor-derived infection suspected infection in If ascites: Paracentesis if able based on presentation + risk factors pre-transplant patients wtih biliary atresia If > 1 month post-transplant, send blood for CMV PCR, EBV PCR; + adenovirus PCR if febrile Systemic inflammatory response criteria and specific evidence of hypo-perfusion or organ dysfunction not explained by an alternative process Patient with severe sepsis/ septic shock? Start Meropenem* + Vancomycin + Start Piperacillin-tazobactam* Caspofungin (restricted - need ID code) ADD Vancomycin if patient has central venous *Consult ID or Antimicrobial Follow Pediatric Dosing Guideline catheter or findings of soft tissue infection Stewardship Program for empiric therapy Modify therapy as needed if patient has prior Follow Pediatric Dosing Guideline recommendation if patient history of multi-drug resistant organism(s) has severe beta lactam Modify therapy as needed if patient has prior allergy ID consult recommended history of multi-drug resistant organism(s) ID consult recommended Stable/Improving Stable/Improving at 48 hours*? Repeat cultures before at 48 hours*? modifying therapy *For unexplained deterioriation on initial therapy YĖS before 48 hours, modification of therapy may be indicated - ID consult is recommended Infectious source Infectious source Stop antibiotics identified? identified? ΝÖ YĖS YES YĖS Target antibiotics to Target antibiotics to Alternative identified source - follow identified source - follow (non-infectious) etiology Pediatric Guidelines at Pediatric Guidelines at identified? idmp.ucsf.edu idmp.ucsf.edu These are guidelines only and cannot be applied to every situation. They reflect consensus of the UCSF Pediatric Liver Transplant Program and Pediatric Antimicrobial Stewardship NO Program based on available evidence and hospital antibiogram data. ID consult recommended UCSF Pharmacy & Therapeutics Committee Approved

Anticipate narrowing therapy

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