**Infectious Disease Rotation Curriculum:**

|  |  |
| --- | --- |
|  | **Central nervous system infection**   * Microbiology of bacterial meningitis * Diagnostic work up. When to consider CT head before LP. * Understand how to properly interpret the CSF analysis * What are the antibiotics used for empiric treatment of bacterial meningitis and why? * What are the common causes of aspetic meningitis * Definition of encephalitis, what are the common viruses, how to diagnose and treat. * Diagnosis and treatment of focal CNS infections ( brain and spinal epidural abscess).   **Pneumonia:**   * Differentiate between CAP and HCAP * What are the common organisms causing CAP ( including atypical: Legionella and coccidioides) * Know the diagnostic work up that should be performed for CAP, HCAP, and VAP * Understand the choice for Antibiotic therapy for each.   **Urinary tract infections:**   * Definition of uncomplicated UTI ( acute cystitis ) – everything else is complicated. * Microbiology, diagnosis and antibiotic therapy for uncomplicated vs complicated UTIs. * Definition and treatment options for recurrent UTIs. * Microbiology and treatment of prostatitis. * Indications for treating asymptomatic bacteruria. * Diagnosis and treatment of catheter associated urinary tract infections. * Differential diagnosis of sterile pyruia ( TB, Legionella, leptospirosis). |
|  | **Skin and soft tissue infections:**   * Know the microbiology of cellulitis, including community acquired MRSA, common presentation and treatment. * Know the microbiology, common presentation and treatment of necrotizing fasciitis. * Know the microbiology and treatment of diabetic foot infections. * Know the clinical presentation, diagnosis and treatment of toxic shock syndrome.   **Osteomyelitis**:   * Classification and microbiology of Osteomyelitis. * What are the diagnostic methods and treatment options for Osteomyelitis. * Evaluation and Management of Diabetes–Associated Osteomyelitis * Evaluation and Management of Vertebral Osteomyelitis   **Infectious arthritis:**   * Know how to interpret synovial fluid analysis * Know your different etiologies of infectious arthritis including gram positive, non gonococcal gram negative and disseminated gonococcal, lyme and viral arthritis. Understand the diagnostic and therapeutic measures. * Diagnosis and pharmacologic and surgical management of prosthetic joint infections.     **Infectious Diarrhea and C- diff colitis:**   * What organisms causes diarrhea with and without fever * What organisms causes pseudo appendicitis ( yersinia, Capmylobacter and RMSF). * When should you send for stool culture and O&P. * Recognize the clinical spectrum of C-diff and diagnosis tests * How to treat initial, first and subsequent recurrences of C-diff infections. |
|  | **Blood stream infections:**   * When must you remove central venous line in documented blood stream infections. * What is the significance of Staph aureus isolated in blood culture. * When to get an Echocardiogram. * What is the significance and how to treat of Gram negative bacteremia including ESBL. * What is the significance of candida isolated in blood stream and what are the risk factors of developing candidemia in ICU and non-ICU patients.   **Infective endocarditits:**   * Know the microbiology of native and prosthetic valve endocarditis. * How to diagnose and treat endocarditis. * What are the HACEK organisms and how are they isolated. * What are the indications for surgical valve replacement. * What are the indications for prophylactic antibiotics.   **Neutropenic fever:**   * What is the definition of chemotherapy induced neutropenic fever. * Understand the gram negative bacterial translocation mechanism of acquiring the infection. * What are your antibiotic coverage options. * What are the indications to start Vanc. * When to consider antifungal. |
|  | **Sexually transmitted diseases:**   * What is the differential diagnosis of sexually transmitted genital ulcers? * Recognize the different phases of syphilis, and definition of latent infection. * How to diagnose syphilis, difference between specific and non specific antibody testing, and in which phase each are expected to be positive. * What is the treatment of primary, secondary, latent and neurosyphilis. * When to treat genital syphilis and when to give prophylactic therapy. * Know the common etiology, diagnosis and treatment of urethritis, cervcitis and PID.   **HIV:**   * Understand the serologic testing for HIV, and who should be screened. * Recognize the clinical presentation and method of diagnosis for acute retroviral syndrome. * What are the indications for initiation HAART. And what are the indications for immediate cessation of HAART. * What are the indications for prophylaxis, what antibiotics and at what CD4 level. * Recognize the clinical presentation, diagnostic methods and treatment for PJP, MAC, Toxoplasmosis and cryptococcal meningitis.   **Tuberculosis:**   * Criteria for diagnosing latent TB in various risk groups. * How to treat latent TB. * Who should be placed in respiratory isolation and Criteria for diagnosis of active TB * What is Multidrug-Resistant and Extensively Drug-Resistant Tuberculosis. |
|  | During this rotation, resident is expected to:   * learn how to order, and interpret the results of immunologic, serologic and microbiologic testing including: • Serologic antigen and antibody testing • Cultures and sensitivities • Gram stains, fungal stains, acid-fast stains • Antimicrobial drug levels * Demonstrate understanding of the major antibiotic classes, their use & common side effects. |