Prevention and Proper Reporting of Hospital Acquired Infections

Know your devices!

- Know best practices for **use, insertion & maintenance** of intravascular and urinary devices:
    - **Minimize intrusions**, *eg*, blood draws.
    - Meticulous technic for obtaining specimens.
- **Remove devices as soon as not needed.**
- Follow evidence based guidance for diagnosis and management of NI.
- *Be mindful of reporting requirements!*

* * * * * * * * * * * *

Catheter Related Bloodstream Infections

- **Most** pts with suspected Catheter Related Bloodstream Infection do **not** in fact have it!
- Reportable Central Line Associated Bloodstream Infection is defined by:
    - Patient has any central venous catheter (CVC) for >2 days.
        - **PICCs are CVCs!**
    - A single blood culture (BC):
        - Growing a recognized pathogen.
        - Obtained from any site.
        - Regardless of how many BCs done or site from which (+) originated.
        - No other identified source of the bacteremia.
    - Two (+) BCs with the same "skin contaminant" organism – all other criteria the same.
- **No routine BC draws from lines, especially CVCs.**
- Paired quantitative BC or DTP only with **high index of suspicion of infection**:
    - Tunneled catheters
    - Temporary catheters in pts with increased risk of complications of removal/reinsertion
- **Remove** all CVCs/PICCs **ASAP.**
- Use of disinfecting port caps for all CVCs.

Clostridium difficile Infection (CDI)

- Increased risk with broad–spectrum antibiotics, fluoroquinolones and clindamycin.
- **Test only patients likely to have disease!**
    - No indication to test asymptomatic patients or patients with formed stool.
    - Target patients with loose, watery or unformed stool that takes the shape of the container.
    - Malodor &/or "green" color $\Longrightarrow$ poor positive predictive value for CDI!
    - If the patient is stable, consider observation for 24 hrs to determine persistence of symptoms rather than testing after a single loose stool.
    - Also consider if diarrhea may be due to laxative use, other medications or enteral feedings, especially if any of these have been recently started.
- **Order a single *C. difficile* test.** Current methods do not require multiple samples.
- There is NO indication for "test of cure" repeat assays.
    - No evidence of clinical value.
    - Spores persist – big problem when PCR based testing is used.
    - A repeat (+) after 8 weeks generates a new reportable event!
- **If the patient is being admitted, ensure that the test is sent within the first 72 hours** so that it is not counted as a hospital onset infection.
- Place patient in appropriate – *hospital specific* – precautions while waiting for results.
- Please utilize the CDI Order Set for treatment orders.

* * * * * * * * * * * *

Urinary Tract Infection (including Catheter Associated UTI)

- Reportable CAUTI is defined by:
    - Catheter for >2d & present at time of culture or removed the day before AND
    - $>10^5$ cfu/ml organisms AND
    - Any *one* sign/symptom: T>38.0°C, suprapubic tenderness, costovertebral angle pain or tenderness (urgency, frequency, dysuria only if catheter is out.)
- **Target urine cultures for patients with possible infection & urinary symptoms**:
    - "Soft" neurologic/behavioral signs do not correlate with UTI in adults.
    - Even if there is another probable source of infection, a (+) urine culture may still generate a reportable CAUTI. (See definition above.)
    - Avoid "routine" urine cultures, including when removing a catheter.
- **Pyuria does not confirm the diagnosis of (CA)UTI!**
    - By itself, pyuria is **NOT** an indication to Rx bacteriuria!
- Remove catheters ASAP.
- **Avoid Rx of asymptomatic bacteriuria or candiduria EXCEPT in pregnant women or pre–urologic procedure with anticipated mucosal bleeding.**
- Please utilize the UTI Order Set for treatment orders.