MRSA Urinary Tract Infection



Steps:

1. Count the number of urine cultures with ≥105 MRSA during the hospitalization.

1a. If the number is 0, then there is no MRSA UTI.

1b. If the number is >0, then proceed to next step.

2. Use structured vitals data to determine if patient had fever (>38°C) during hospitalization. Fever must have been recorded between -24h of the date of collection of the first positive MRSA urine culture and +24h of the date of collection of the last positive MRSA urine culture.

2a. If FALSE (no fever), proceed to step 3.

2b. If TRUE (fever), proceed to step 4.

3. Use NLP to determine if at least one of the signs/syptoms of UTI are present. Signs/symptoms include urgency, frequency, dysuria, or suprapubic tenderness. Signs/symptoms must have been recorded between -24h of the date of collection of the first positive MRSA urine culture and +24h of the date of collection of the last positive MRSA urine culture.

3a. If FALSE, then classify this patient as having ASYMPTOMATIC BACTERIURIA. (done)

3b. If TRUE, proceed to step 4.

4. Use structured microbiology data to determine if there are any other positive cultures from normally sterile sites (not just for MRSA). The positive culture must not be a common commensal organism, and must have been collected between the date of hospital admission and +24h of the date of collection of the first positive MRSA urine culture.

A normally sterile site is defined as:

* blood
* bone and bone marrow
* cerebrospinal fluid (CSF)
* internal body sites
  + specimen obtained from surgery or aspirate from one of the following: brain, heart, liver, lymph node, spleen, vitreous fluid, kidney, pancreas, ovary
* joint fluid
  + includes synovial fluid and needle aspirate or culture of any specific joint: knee, ankle, elbow, hip, wrist
* muscle
* pericardial fluid
* peritoneal fluid
  + includes abdominal fluid, ascites
* pleural fluid
  + includes chest fluid, thoracentesis fluid

Common commensal organisms include:

* diphtheroids [Corynebacterium spp. not C. diphtheriae]
* Bacillus spp. [not B. anthracis]
* Propionibacterium spp.
* coagulase-negative staphylococci [including S. epidermidis]
* viridans group streptococci
* Aerococcus spp.
* Micrococcus spp.

4a. If TRUE, then classify this patient as having a NON-UTI INFECTION. (done)

4b. If FALSE, proceed to step 5.

5. Use NLP to determine if the patient had a urinary catheter present at any time within -7d of the date of collection of the first positive MRSA urine culture.

5a. If TRUE, then classify this patient as having a CAUTI. (done)

5b. If FALSE, then classify this patient as having a UTI. (done)