5-31-2017

Transrectal Ultrasound Guided Prostate Biopsy Antibiotic Prophylaxis: Standard vs. Augmented Antibiotic Regimens, and the Role for Pre-Biopsy Rectal Swab Cultures

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**Recommended Citation**

Hardacker, MD, MBA, Thomas; Squadrito, RN, Danielle; Caputo, MD, Christopher; and Mann, MD, Mark, “Transrectal Ultrasound Guided Prostate Biopsy Antibiotic Prophylaxis: Standard vs. Augmented Antibiotic Regimens, and the Role for Pre-Biopsy Rectal Swab Cultures” (2017). *House Staff Quality Improvement and Patient Safety Posters*. Poster 52.

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Current AUA guidelines recommend a single dose of fluoroquinolones (FQs) or cephalosporins prior to transrectal prostate biopsy.

FQs are standard in the prophylaxis of transrectal prostate biopsies; however, they have come under scrutiny as a result of increasing resistance and FDA Black Box warnings.

To evaluate peri-procedural antibiotic prophylaxis regimens based on pre-procedural rectal swab cultures.

To evaluate infection rates between transrectal biopsy patients receiving FQs alone and those receiving ceftriaxone or gentamicin in addition to FQs.

Retrospective study of a cohort of 274 males between age 43-86, undergoing Transrectal Ultrasound (TRUS) guided Prostate Biopsy between 8/2016 to 3/2017

Post-biopsy infection defined as fever or confirmed urinary tract infection within 2 weeks of biopsy

Cohort was also subdivided into groups receiving standard antibiotic prophylaxis with Ciprofloxacin or augmented antibiotic prophylaxis with Ciprofloxacin AND Ceftriaxone, Gentamicin, or Zosyn

A trend toward decreased infection rates in augmented prophylaxis as compared to fluoroquinolones alone

Retrospective data collection on a small sample size

Lack of standardized antibiotic prophylaxis protocol

Standardized rectal swab and pre-procedural prophylaxis protocol

Prospective data collection and cost benefit analysis of rectal swab-guided prophylaxis vs. standard prophylaxis regimen