

Title: Review of empiric ceftriaxone elimination for low-risk non-neutropenic fever in pediatric oncology patients with central venous catheters, a follow-up analysis.

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Abstract Text:

Purpose - Treatment for non-neutropenic fever (NNF) in pediatric oncology patients with central venous catheters (CVC) is poorly defined and varies between institutions. Our providers previously gave empiric ceftriaxone for 48 hours pending cultures, regardless of patient clinical presentation. A recent review of local low-risk NNF patients given empiric ceftriaxone found no positive blood cultures over 5.6 years, supporting the practice change of reserving antibiotics for high-risk NNF. This follow-up analysis aims to compare outcomes of low-risk NNF patients who do not receive empiric ceftriaxone therapy to historical patients who received empiric therapy.

Methods - This is an observational chart review of NNF events in low-risk pediatric oncology patients with a CVC and NNF diagnosis that is currently pending Institutional Review Board approval. Patient charts will be reviewed for 6 months post-practice change to identify NNF events for review. Inclusion criteria: less than or equal to 25 years old, CVC, cancer diagnosis, ongoing chemotherapy, febrile, ANC greater than 500, suspected source of fever, and blood cultures. Exclusion criteria: unstable presentation, visible line infection, currently undergoing induction treatment, and Hickman or Broviac CVC. Records will be evaluated for positive blood cultures, viral panel tests, *Clostridium difficile* cultures, presenting symptoms, worsening symptoms, adverse events, and demographic data as it relates to the NNF event. Findings from this review will be compared to historical findings in patients who received empiric antibiotic therapy to determine if reserving antibiotics for high-risk NNF led to a change in patient outcomes. All data will be stored in a secure database to maintain confidentiality. De-identified data-sets may be used in the development of risk-prediction models to refine which NNF patients should receive empiric antibiotic therapy.

Results/Conclusions – Pending final data collection.