Don’t Order Follow-Up Blood Cultures (FUBC) In Patients with Gram Negative Bacteremia Without Risk Factors

Persistent Gram-negative rod (GNR) bacteremia is uncommon under appropriate antibiotic therapy. A recent study showed that follow-up blood cultures (FUBCs) to confirm clearance 24-48 h after initiation of antibiotics, added little value in the management of GNR bacteremia in adults had no impact on 30-day mortality or 30-day readmission rates. It was associated with longer length of stay and antibiotic duration. (1)(2)

In another systematic review and meta-analysis obtaining FUBCs in patients with GN-BSI was associated with decreased mortality. Limitations of the literature included a lack of randomized studies and few patient subgroup analyses. (3), However, the utility of FUBC in children is still unknown.

Retrospective cohort study included infants <90 days of age with bacteremia and UTI secondary to E coli at 22 hospital, Patients with *Escherichia coli* are more likely to have a negative FUBC. Readmissions within 30 days were similar among infants with positive FUBCs, negative FUBCs, and no FUBCs and they concluded that FUBCs in infants with bacteremic UTI should not be routinely performed, especially for *E coli,* and it is unclear whether FUBCs improve outcomes. (4)

There is no clear benefit in obtaining FUBC in patients with gram negative bacteremia without risk factors as mentioned in several observational studies. This necessitates the need of Randomized trials in children before adoption of routine FUBC in patients with Gram negative bacteremia.

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