OBJECTIVE: To determine the frequency of positive blood cultures in patients with fevers in the initial 48-hour postoperative period.

STUDY DESIGN: All patients who had blood cultures drawn during the initial 48 hours postoperatively while in the pediatric intensive care unit (PICU) at the University of Minnesota Children’s Hospital-Fairview during an 18-month period were included in the current study. Six hundred two postoperative patients were admitted to the PICU during the study period. Patients with a temperature >100.4 degrees F and who had blood cultures drawn were identified. Patients for whom the operative procedure was not the first in that admission, those discharged in <48 hours, and those with an indwelling central venous catheter for >24 hours before their admission were excluded.

RESULTS: Sixty-six of these patients were febrile and had blood cultures drawn in the initial 48 hours postoperatively. One hundred eleven blood cultures were obtained. A single (0.9%) blood culture was positive. The cost per positive culture was estimated at $23,532.

CONCLUSIONS: Even in patients admitted to the PICU, fever in the initial 48-hour postoperative period is unlikely to represent bacteremia in low-risk pediatric patients. Blood cultures in these patients are, therefore, unlikely to yield positive results. Procurement of
blood cultures in this patient population is not justified. Cessation of the practice of blood culture procurement in this patient population may both focus care and provide enable meaningful cost savings.

More IV news at IVTEAM