“When an infection is suspected in a child with cancer and a central venous line (CVL), cultures are often only obtained from the CVL and not from a peripheral vein (PV). This study was undertaken to evaluate the importance of concomitant blood cultures from the CVL and a PV.” Handrup et al (2014).

Reference:

Percutaneous retrieval of fractured PICC fragments via the femoral vein http://ctt.ec/owa4i+ @ivteam #ivteam

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Abstract:

BACKGROUND: When an infection is suspected in a child with cancer and a central venous line (CVL), cultures are often only obtained from the CVL and not from a peripheral vein (PV). This study was undertaken to evaluate the importance of concomitant blood cultures from the CVL and a PV.

PROCEDURE: Clinical data and the results of all cultures taken concomitantly from the CVL and a PV were registered prospectively in children admitted with fever from April 2008 to December 2012 at the Department of Pediatrics at Aarhus University Hospital Skejby.

RESULTS: During the study period 654 paired cultures obtained from the CVL and from a PV within two hour of each other were included. A true bloodstream infection (BSI) was registered in 112 episodes. In 20 (17%) out of 112, true BSI growth of a microorganism was detected only in the culture from a PV including seven cases of Escherichia coli and three cases of Staphylococcus aureus. In 52 episodes the same microorganism was cultured from both the CVL and a PV. Twenty-four of these episodes were classified as catheter-related bloodstream infections (CRBSI) using differential time to positivity. In total, 64 (57%) of all true BSI were defined as CRBSI.
CONCLUSIONS: Blood cultures should be obtained from a PV in addition to cultures from CVL at the onset of fever in pediatric patients with cancer in order to maximize the findings of true BSIs. The frequency of CRBSI may be over-estimated if blood cultures are drawn from CVL only.

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