

Blood Versus Lung Aspirate Culture in Pneumonia

A prospective study conducted in our hospital to find out the etiology of pneumonia by doing lung aspirate and blood culture has revealed observations different from a recent publication in the Journal(1). During a period of one year, 75 children with lobar pneumonia, clinically and radio-logically diagnosed, were studied and were followed up for 3 months after discharge. All had blood and lung aspirate culture done on the day of admission. *Table I* shows the culture positivity rates and bacterial isolates.

TABLE I-Culture Positivity Rates and Bacterial Isolates

Organisms	Blood Culture 25 (33%)	Lung aspirate culture 12 (16%)	Blood and lung aspirate culture 6 (8%)
Klebsiella	13	3	2
<i>Staph. aureus</i>	4	4	3
<i>Strep, pneumonia</i>	3	-	-
<i>H. influenzae</i>	2	1	-
<i>Ps. pyocyaneus</i>	2	1	1
Citrobacter	1	1	-
Acinetobacter	-	2	-

Percentages are calculated out of a total sample size of 75.

Thirty nine children had received pre-admission antibiotics and among them, blood culture was positive in 12 (30%) whereas lung aspirate culture was positive in only 3(8%). Of the remaining 36 children without prior antibiotics, 8 (22%) cases in each group had positive culture.

Subcutaneous emphysema over the aspiration site developed in 3 (4%) but did not require any treatment. In 6 children with Klebsiella pneumonia, only left lower lobe was involved and 21.6% developed recurrent asthmatic episodes after pneumonia.

It is concluded that blood culture is superior to lung aspirate culture since it yields higher positive culture rates, is less invasive and does not require additional precautions or procedures in a child with pneumonia getting intravenous medications.

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REFERENCE

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