

LETTER

Mini-BAL: not a small matter

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See related research by Lacroix et al., <http://ccforum.com/content/17/1/R24>

In the study by Lacroix and colleagues [1] in the previous issue of *Critical Care*, we appreciate the early use of the mini-bronchoalveolar lavage (mini-BAL) to diagnose health care-associated pneumonia (HCAP). However, some limitations of the study create difficulties in initiating this protocol in our institution.

Hospitalized/intubated patients with HCAP were not studied. These patients represent a significant fraction of those undergoing blood culture/mini-BAL for diagnosis.

In our population, emergency physicians dispense broad-spectrum antibiotics expediently as a quality measure; therefore, subsequent mini-BAL may yield few results. The article did not present final antibiotic selections, patient outcomes, or antibiotic de-escalation. We cannot estimate the final cost of the antibiotic course or compare it with the cost of mini-BAL/bronchoscopy. The antibiotics might not be more cost-effective than the procedure.

Mini-BAL without bronchoscopy may be cost-effective but has low yield [2]; 31.5% patients had altered mental status, contraindicating bi-level positive airway pressure (BiPAP) during mini-BAL [3]. We do not know whether sedation (which may be risky) was used.

Results of mini-BAL culture are compared with those of blood cultures. Blood cultures in community-acquired pneumonia/HCAP (CAP/HCAP) have limitations. Only high-risk patients benefit from blood culture in diagnosing CAP. Also, with prior antibiotics, blood culture sensitivity for CAP/HCAP diagnosis decreases [4]. We do not know whether HCAP organisms were distinguished from colonizing flora.

We applaud the trial as conducted but feel that the inclusion of a comparison of cost, technical descriptions

of the mini-BAL in regard to the need for bronchoscopy and sedation, inclusion of hospitalized/intubated patients, choice of antibiotics/de-escalation, and use of antibiotics prior to enrollment would more effectively support the authors' conclusions.

Abbreviations

BAL, bronchoalveolar lavage; CAP, community-acquired pneumonia; HCAP, health care-associated pneumonia.

Competing interests

The authors declare that they have no competing interests.

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References

1. Lacroix G, Prunet B, Bordes J, Cabon-Asencio N, Asencio Y, Gaillard T, Pons S, D'Aranda E, Kerebel D, Meaudre E, Goutorbe P: **Evaluation of early mini-bronchoalveolar lavage in the diagnosis of health care-associated pneumonia: a prospective study.** *Crit Care* 2013, **17**:R24.
2. Colucci G, Domenighetti G, Della Bruna R, Bonilla J, Limoni C, Matthey MA, Martin TR: **Comparison of two non-bronchoscopic methods for evaluating inflammation in patients with acute hypoxaemic respiratory failure.** *Crit Care* 2009, **13**:R134.
3. Nava S: **Non-invasive ventilation in acute respiratory failure.** *Lancet* 2009, **374**:250-259.
4. Polverino E, Torres A: **Diagnostic strategies for healthcare-associated pneumonia.** *Semin Respir Crit Care Med* 2009, **30**:36-45.

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