

SICU TRAUMA PATIENT VAP Diagnosis and Treatment Protocol:

The clinical triggers for bronchoscopy with BAL included any **three** of the following (only when not explained by other processes)

This applies to **TRAUMA PATIENTS ONLY** (not to every SICU patient)

Suspected VAP (3 out of 5):

- T >38.5 or <35
- WBC >12 or <4, >10% bands
- Macroscopically purulent sputum
- New or changing infiltrate on chest radiograph
- New hypoxia (increase in *daily minimum* PEEP by ≥ 3 or in daily minimum FiO₂ of $\geq 20\%$ over previous day; e.g. PEEP from 5 to 8 or FiO₂ from 40% to 60%)

BAL should only be performed in the presence of clinical triggers.

Confirmed VAP:

VAP established by quantitative culture; $\geq 100,000$ CFU is considered positive.

How to perform BAL:

- Blind endotracheal (inline) suction through ventilator circuit prior to inserting the scope.
- Advance bronchoscope into the lung segment (**without suctioning**) where radiographic changes were seen or into the left lower lobe of patients with diffuse bilateral infiltrates.
- With the bronchoscope wedged into the appropriate lung segment, instill 40 mL of sterile, non-bacteriostatic saline into the lung in two 20-mL aliquots (at same location).
- Walk the specimen to the microbiology laboratory for Gram's stain, and quantitative aerobic and anaerobic culture.
- If the scope is used to suction anything prior to sampling, the procedure is terminated, a new scope is procured and the sample process started over.

