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**Accuracy of clinical definitions of ventilator-associated pneumonia: Comparison with autopsy findings.**

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**METHODS:** We studied patients requiring mechanical ventilation for more than 48 hours who died in the intensive care unit and whose bodies were autopsied. We evaluated 3 clinical definitions of ventilator-associated pneumonia: loose definition, defined as chest radiograph infiltrates and 2 of 3 clinical criteria (leukocytosis, fever, purulent respiratory secretions); rigorous definition, defined as chest radiograph infiltrates and all of the clinical criteria; and a clinical pulmonary infection score higher than 6 points. Sensitivity, specificity, and likelihood ratios were calculated by using pathology pattern as criterion standard.

**RESULTS:** One hundred forty-two (56%) of the 253 patients included had histological criteria of pneumonia. Patients who met the clinical criteria of ventilator-associated pneumonia were 163 (64%) for the loose definition, 32 (13%) for the rigorous definition, and 109 (43%) for the clinical pulmonary infection score. The operative indexes (sensitivity and specificity) of each definition were as follows: loose definition, 64.8% and 36%; rigorous definition, 91% and 15.5%; and clinical pulmonary infection score higher than 6, 45.8% and 60.4%. The addition of microbiological data to the clinical definitions increased the specificity and decreased the sensitivity but not significantly.

**CONCLUSIONS:** Accuracy of 3 commonly used clinical definitions of ventilator-associated pneumonia was poor taking the autopsy findings as reference standard.

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