

Aerosolised antibiotics advantageous in VAT

Aerosolised antibiotics are effective for the treatment of patients with ventilator-associated tracheobronchitis (VAT), according to US-based researchers.

In their study, data were evaluated for 43 critically ill, intubated patients with VAT who were randomised to receive aerosolised antibiotics (n = 19) or placebo for 14 days or until extubation. Antibiotics were prescribed on the basis of Gram stain of aspirated tracheal secretions: Gram-positive bacteria were treated with vancomycin and Gram-negative bacteria were treated with gentamicin.

The primary outcome was the Centers for Disease Control National Nosocomial Infection Survey diagnostic criteria for ventilator-associated pneumonia and clinical pulmonary infection score. Aerosolised antibiotic recipients demonstrated significantly reduced signs of respiratory infection from day 1 (73.6%) to day 14 (35.7%), compared with placebo recipients (75% and 78.6%, respectively), and a reduction in clinical pulmonary infection score. Moreover, aerosolised antibiotic recipients demonstrated lower white blood cell count at day 14, reduced bacterial resistance, reduced use of systemic antibiotics and increased weaning, compared with placebo recipients.

Palmer LB, et al. Aerosolized antibiotics and ventilator-associated tracheobronchitis in the intensive care unit. *Critical Care Medicine* 36: 2008-2013, No. 7, Jul 2008

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