

Diagnosis

- Aspiration pneumonitis is an abrupt chemical injury caused by inhalation of sterile gastric contents.
 - It can progress quickly to a decline in respiratory status followed by rapid improvement within 48 hours of the insult.
 - Chest x rays appear similar to multifocal pneumonia.
- Patients with aspiration events are usually unlikely to produce significant sputum, making the utility of sputum cultures low.
 - Sputum Gram stain and cultures should be considered when the diagnosis is unclear, if purulent sputum is being produced, or if antibiotic treatment is initiated in a hemodynamically unstable patient.

Treatment

- **Hemodynamically stable patients with aspiration events**
 - Antibiotics are not warranted, and supportive care is the mainstay of therapy.
 - Prophylactic antibiotics have not been shown to be helpful in preventing the development of pneumonia after aspiration events.
- **Hemodynamically unstable patients with aspiration events**
 - Treat with regimens for community-acquired pneumonia (CAP) (e.g., ampicillin-sulbactam, ceftriaxone) if the event occurred within 72 hours of admission to a health care facility.
 - Treat with regimens for hospital-acquired pneumonia (HAP) (e.g., cefepime, piperacillin-tazobactam) if the event occurred 72 hours after admission to a health care facility.
 - Coverage for methicillin-resistant *Staphylococcus aureus* (MRSA) can be considered if the prevalence of MRSA in the hospital is high or the patient has a known history of MRSA colonization or infection, intravenous drug use, a recent stay in a nursing home or skilled nursing facility, prolonged hospitalization with unknown MRSA colonization status, or other risk factors for MRSA
 - It is not necessary to add additional anaerobic or atypical coverage.
 - Reassess at 48 hours.
 - If clinical symptoms resolve, antibiotics can be discontinued.
 - If no or minimal improvement and bacterial pneumonia is suspected, treat for 5–7 days.
- **Patients with aspiration events not treated initially with no improvement in 48–72 hours**
 - A proportion of patients (20–25%) may develop bacterial pneumonia 48–72 hours after an aspiration event.
 - If there is no improvement or there is clinical worsening within the first 48–72 hours, consider a course of antibiotic therapy (as above).

References

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