Diagnosis

Aspiration Pneumonitis and Aspiration Pneumonia

* **Aspiration pneumonitis** is an abrupt chemical injury caused by inhalation of sterile gastric contents. It generally causes fever, increased oxygen requirements, and an elevated white blood cell count, and this typically resolves within 1–2 days.1-3
* **Aspiration pneumonia** is a bacterial pneumonia that may develop in some residents (20–25%) 48–72 hours after an aspiration event.4

|  | Aspiration Pneumonitis | Aspiration Pneumonia |
| --- | --- | --- |
| Pathophysiology | Acute lung injury from acidic material | Progression to bacterial infection |
| Clinical features | Range from no symptoms to productive cough, respiratory distress 2–5 hours after aspiration, and improvement within 24 hours | Tachypnea, cough, and fever |
| Chest x ray | May show infiltrates in the right lower lobe or multifocal infiltrates | |
| Treatment | Active monitoring  Prevention—speech and swallow evaluation | Antibiotics  Respiratory support |

Treatment

* **Aspiration event and the resident remains stable2,5** 
  + Antibiotics are not warranted; supportive care is the mainstay of therapy.
  + Prophylactic antibiotics do not help prevent the development of pneumonia.
  + **Aspiration event and the resident becomes unstable**
  + The following signs are indicative of unstable residents: increased oxygen requirements, tachypnea, tachycardia, relative hypotension or temperatures persistently above 99°F or above the resident’s baseline.6,7
  + Consider starting antibiotics for residents who are clinically unstable.7
  + It is not necessary to add additional anaerobic or atypical coverage to beta-lactam therapy.3
  + Consider transfer to an acute care setting if consistent with goals of care.8
  + [Place local treatment recommendations here]
  + [Place local treatment recommendations here]
* **For unstable residents with a history of infection or colonization with *Pseudomonas aeruginosa*, consider using an antibiotic with activity against *Pseudomonas*3,9**
  + [Place local treatment recommendations here]
  + [Place local treatment recommendations here]
  + **For unstable residents with a history of colonization or infection with methicillin-resistant *Staphylococcus aureus* (MRSA), consider adding vancomycin or linezolid to the above regimens.3,9**
  + **Reassess at 48 hours.2,8**
  + If clincial symptoms resolve, antibiotics can be discontinued.2
  + If no or minimal improvement and bacterial aspiration pneumonia is suspected, treat for 5–7 days.8
  + For residents who were not started on antibiotics and who have not improved or have worsened, consider a course of antibiotic therapy (as above).2

Prevention

* Measures that may reduce risk of aspiration events include positioning the resident to sit up during meals and working with speech therapy to provide thickened liquids at meals if appropriate.2

References

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AHRQ Pub. No. 17(21)-0029

June 2021