# **Aspiration Pneumonia**

# **Definitions**

### **Aspiration pneumonitis (Chemical pneumonitis)**

A non-infectious chemical injury caused by the inhalation of sterile oropharyngeal or gastric contents. It is commonly characterized by systemic symptoms (i.e. dyspnea, hypoxia, fever) and radiographic infiltrates which resolve within 48 hours without the need for antimicrobial therapy.

#### **Aspiration pneumonia**

Bacterial infection caused by the inhalation of pathogenic bacteria in oral secretions. When preceded by a macroaspiration event, it is commonly characterized by radiographic infiltrates and systemic symptoms (i.e. dyspnea, hypoxia, fever) that persist longer than 48 hours.

# **Antibiotic Therapy**



The addition of metronidazole for aspiration pneumonia is <u>not routinely required</u>. Metronidazole can be considered when a severe anaerobic infection is suspected (i.e. lung abscess, empyema, etc.)

PO Amoxicillin-clavulanate 875/125 mg BID

IV Ceftriaxone 1 g q24h

If anaphylaxis to beta-lactams
Moxifloxacin 400 mg PO/IV daily

# **Duration**

5 to 7 days

# **Clinical Considerations**

Distinguishing between pneumonitis and pneumonia

- Chemical pneumonitis can present with acute radiographic changes on initial imaging at the time of an aspiration event.
- Rapid resolution of respiratory symptoms is often suggestive of chemical pneumonitis.
- Persistence of radiographic infiltrates after ~48 hours is consistent with aspiration pneumonia.
- Repeat imaging (e.g. chest x-ray) is recommended 48 hours after the aspiration event in order to distinguish between chemical pneumonitis and established aspiration pneumonia. Resolution or absence of radiographic infiltrates often indicates a pneumonitis event (i.e. chemical injury). In such cases, antimicrobial therapy should be discontinued.

