Clinical Evaluation of People with Possible Inhalational Anthrax

History of exposure, or occupational/environmental risk with 2–5 day illness of:

Symptoms

- Fever with or without chills
- Sweats, often drenching
- Fatigue, malaise
- Cough (usually nonproductive), shortness of breath
- Chest discomfort, pleuritic pain
- Nausea, vomiting, diarrhea, abdominal pain
- Headache, myalgias
- Sore throat

Signs

- Fever

NO

- Observe closely
- Provide antimicrobial prophylaxis if exposure is confirmed (*1*)

YES

Initial evaluation

- Obtain white blood cell count (WBC), chest radiograph (CR), and blood cultures
  - WBC: normal to elevated, neutrophilia with bands
  - CR:
    - Mediastinal widening,
    - Pleural effusion,
    - Pulmonary infiltrate
- Consider chest computerized tomography (CT) if CR is normal
- Consider rapid diagnostic testing for influenza
- Notify public health authorities

WBC, CR, CT within normal limits and patient mildly ill

- Observe closely for development of new symptoms
- Await blood cultures
- Initiate or continue prophylaxis (*1*)

Either WBC, CR, CT abnormal or patient moderately/severely ill

Begin antimicrobial therapy (*2*)

If pleural effusion present, obtain fluid for gram stain and culture, polymerase chain reaction, and cell block for immunohistochemistry*

If meningeal signs or altered mental status present, perform lumbar puncture

Other diagnostic tests†

* Available through CDC or LRN. Cell block obtained by centrifugation of pleural fluid.

† Serologic testing available at CDC may be an additional diagnostic technique.

References

1. CDC. Update: investigation of anthrax associated with intentional exposure and interim public health guidelines, October 2001. MMWR 2001;50:889–93.
2. CDC. Update: investigation of bioterrorism-related anthrax and interim guidelines for exposure management and antimicrobial therapy, October 2001. MMWR 2001;50:909–19.

Source: Centers for Disease Control and Prevention. Update: Investigation of bioterrorism-related anthrax and interim guidelines for clinical evaluation of persons with possible anthrax. *MMWR* 2001; 50:945.