Pneumococcal Disease

Clinical Guidance for Pneumococcal Disease

Health Care Providers
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KEY POINTS

- Vaccines are recommended to prevent pneumococcal disease.
- *Streptococcus pneumoniae* is a common bacterial cause of acute otitis media, sinusitis, community-acquired pneumonia, and bacterial meningitis.
- Guidelines for treatment vary by syndrome.

Prevention

Vaccination

Vaccination is the best way to prevent pneumococcal disease. See Pneumococcal Vaccine Recommendations for more information.

App provides patient-specific guidance

The ***PneumoRecs VaxAdvisor*** mobile app helps vaccination providers quickly and easily determine which pneumococcal vaccines a patient needs and when.

PneumoRecs VaxAdvisor

Chemoprophylaxis

CDC doesn't have guidance for chemoprophylaxis of close contacts of patients with pneumococcal disease. Secondary cases of invasive pneumococcal infection are uncommon.

For children with asplenia

The American Academy of Pediatrics typically recommends **daily antimicrobial prophylaxis** with oral penicillin V for children with functional or anatomic asplenia. This includes those with sickle cell disease.

In general, clinicians should consider antimicrobial prophylaxis for all children with asplenia younger than 5 years of age. It should continue for at least 1 year after splenectomy. Vaccination is also recommended.

KEEP READING:
Sickle Cell Information for Healthcare Providers

Testing and diagnosis

Diagnosis

Definitively diagnosing *S. pneumoniae* infection generally relies on isolating the organism from blood or other normally sterile body sites. Tests are also available to detect capsular polysaccharide antigen in body fluids. There are also molecular detection methods using nucleic acid

amplification tests (NAAT).

Urinary antigen test

A commercially available urinary antigen test can detect the C-polysaccharide antigen of *S. pneumoniae* as a cause of community-acquired pneumonia.

The test

- Is rapid and simple to use
- Has a reasonable specificity in adults
- Can detect pneumococcal pneumonia after initiation of antibiotic therapy

Patient management

Guidelines for treatment vary by syndrome:

- Pneumonia
- Common illnesses for adults and children

Antibiotic selection for serious infections

At the beginning, antibiotic treatment for serious pneumococcal infections typically includes broad-spectrum antibiotics. Once antibiotic testing is done, healthcare providers may choose a more targeted, or narrow-spectrum, antibiotic.

Resources

Pneumococcal disease chapter of the Pink Book

Pneumococcal disease chapter of the Red Book

SOURCES

CONTENT SOURCE:
National Center for Immunization and Respiratory Diseases; Division of Bacterial Diseases