Inappropriate Diagnosis of Pneumonia in Hospitalized Adults: A Cohort Study in 48 Michigan Hospitals

In this prospective cohort study including 17,290 hospitalized adults treated for community-acquired pneumonia (CAP), 12% were inappropriately diagnosed with CAP. For those inappropriately diagnosed, 88% received a full course of antibiotics. A full course of antibiotics was associated with more antibiotic-associated adverse events (e.g., renal failure) than a brief course.

A total of 12% of hospitalized patients treated for CAP met criteria for inappropriate diagnosis, of whom 87.6% received full antibiotic courses.

Characteristics Associated with Inappropriate Diagnosis of CAP:
- Older adult
- Dementia
- Altered Mentation

Inappropriate diagnosis of CAP among hospitalized adults is common, particularly among older adults, those with dementia, and those presenting with altered mentation. Full course antibiotic treatment of those inappropriately diagnosed with CAP may be harmful.