

## Treating Acute Bronchitis and the Use of Antibiotics

Around twenty million prescriptions for infections of the respiratory tract are written every year. The common diagnoses include URIs, otitis media, pharyngitis, sinusitis, and acute bronchitis; and take note, this is happening in the US alone. If you try to combine all prescriptions around the world, perhaps it can reach to billions.

Studies have shown that around 70% of adults and children diagnosed with acute bronchitis receive unnecessary antibiotics. Some clinical studies were documented showing primary care physicians prescribing antibiotics though literature suggests non-prescription of antibiotics in the case of acute bronchitis.

At present, there are a growing number of patients developing antibiotic resistance. Experts in the field of infectious disease claim that the scenario is rapidly increasing and that it is because of the unnecessary antibiotic prescriptions made by the physicians. If this kind of approach is duplicated over and over again, the entire world will be gravely affected.

Adult patients with acute bronchitis but with no underlying pathology are very much different from patients having COPD. The latter is usually treated with antibiotics. Since most cases of acute bronchitis are caused by viral infections, antibiotic therapy is not recommended. Viral bronchitis is characterized by purulent sputum which definitely indicates that there is no bacterial infection. With the right supportive care, acute bronchitis will disappear in a maximum period of seven days. If symptoms worsen after seven days, this is still considered as a non-viral course of action, but the patient can already use antibiotics.

Most patients with acute bronchitis complain about their non-productive and annoying cough. Physicians usually give aerosolized bronchodilators to reduce coughing. Normal patients are allowed to use bronchodilators for a couple of days.

Not all patients need antibiotics, especially in the case of bronchitis. There are however, certain exceptions to the use of antibiotics. Here are some of the situations:

1. Ten days of protracted cough - only a small number of patients having

viral bronchitis develop protracted cough; and if a 48 hour trial using bronchodilator does not show cough relief, the prescription of an antibiotic is quite reasonable. The pathogens causing the protracted cough can include mycoplasma pneumoniae, bordetella pertussis, and Chlamydia pneumoniae. The pathogens mentioned are vulnerable to antibiotics such as macrolide. The most commonly prescribed antibiotic is azithromycin because it only has few side effects compared to erythromycin. You will be prescribed to continue with azithromycin for at least five days which can cost around \$38.

2. Bronchitis patients with aggravating symptoms. If this is the case, the patient must be re-evaluated for possible bacterial infection. Remember that acute bronchitis is a viral infection that disappears after five to seven days; and if you observe that the symptoms are getting worse, you must tell your doctor immediately.

3. Patients with underlying cystic fibrosis and COPD. Patients having cystic fibrosis tend to have staphylococcus aureus, otherwise known as gram-negative infections. Patients with COPD often need antibiotic to treat haemophilus influenzae and streptococcus pneumoniae.

4. A viral influenza outbreak can complicate how acute bronchitis is treated. This is important when the flu season begins. During this season, bacterial complications are common among adults. And if your acute bronchitis worsens after seven to ten days, you might be given an antibiotic.

These are four special cases when acute bronchitis can be given antibiotics, but under normal conditions, the prescription of these drugs must not be made.

Educating the patient is a very important matter. They often have misconceptions as to the use of antibiotics. Physicians and doctors should show their expertise and since they are the ones equipped with the right knowledge, they must educate their patients in the proper use of antibiotics. Try to tell them that not all illnesses or diseases require the use of antibiotics. Once your patients are aware of this important fact, they may not ask for any antibiotic, not unless the situation calls for its use.

As patients, you should not expect an antibiotic prescription every time you visit the doctor. Be thankful if antibiotics are not required because you can cut your medicine costs. Instead, you can use the money to buy vitamins that will make your body strong and healthy to avoid diseases such as acute bronchitis.