QUESTION: As a night-time ventilator user due to a neuromuscular condition, I need to be alert to any infection developing in my lungs or sinuses. I typically ask for and use an antibiotic at the first sign of any infection. However, I hear more and more warnings that taking these medications can result in a resistance to antibiotics. What guidance can you offer to help me (and my family physician) decide when to take antibiotics?

ANSWER: Norma MT Braun, MD, FACP, FCCP, Ombudsman, Clinical Professor of Medicine, Columbia University, College of Physicians & Surgeons and Senior Attending, Department of Medicine, Pulmonary/Critical Care/ Sleep Division, St. Luke’s–Roosevelt Hospitals, New York, NY, nbraun@chpnet.org

It would be helpful to know whether the questioner uses NIV or ventilates via a tracheotomy, and the underlying lung is normal or diseased. This can make a difference for how to determine whether there is a bacterial or other infection going on. Further, how often does the person take antibiotics? The potential for resistance is real but more likely when the person uses antibiotics frequently.

There are other strategies for preventing/controlling infections: daily hygiene, daily clearing of nasal passages with normal saline rinses, careful oral hygiene care, preventing reflux from the GI tract, limiting contact with infected people, vaccination for both patient and caretakers, adequate diet and hydration. Antibiotics ARE ONLY USEFUL FOR BACTERIAL INFECTIONS and might be needed when there are specific findings for infection such as a change in respiratory secretions to more in volume, viscosity, and color, and/or when coughing has changed to being more frequent and more intense. The only antibiotic which might be useful even in the absence of a specific BACTERIAL infection is Azithromycin, as it has an immune-boosting effect and has helped patients with interstitial pulmonary fibrosis, and it reduces the frequency of exacerbations for COPD. The patient may need to be examined by a health care professional to decide if an antibiotic might help.

ANSWER: Linda Bieniek, CEAP (retired), IVUN Consumer Advisory Board Member, LaGrange, Illinois. Invasive vent user five-plus years; NIV prior 20-plus years.

It is very important that the physician have a culture taken of the secretions/mucus to prescribe the right antibiotic for the type of infection the person has. The culture will show which antibiotics are effective/sensitive versus those that are resistant to this bacteria. Taking the wrong antibiotic is counterproductive and contributes to building resistance to these meds. Many doctors will prescribe the meds after talking with the patient over the phone. Mine did for years, and as a result of overtaking one antibiotic, I have developed a propensity to another infection.