



EDITORIAL

Lower respiratory tract infections: not only less antibiotic prescriptions but also more evidence, please

Management of both upper and lower respiratory tract infection is very relevant in general practice, mainly because of the high incidence of these two conditions and their effects on daily activities and quality of life of patients. In this issue of the journal Feldman [1] reviews the available literature on the management of lower respiratory tract infection. To what extent does this evidence help us in daily practice?

Accurate diagnosis is sometimes difficult in primary care. Several authors have demonstrated that a considerable proportion of patients presenting with an acute cough have in fact undetected asthma or COPD [2,3]. Of those patients whose acute cough lasts longer than two weeks, up to 50% are said to have a chronic obstructive lung disease; patient characteristics such as age, pack-years of smoking, symptoms of wheezing and allergic complaints should assist the clinician. However, these findings have not yet been confirmed by others. Furthermore, combinations of signs, symptoms and simple additional tests were not assessed by these authors. Another important diagnostic problem is that of differentiating between acute bronchitis and pneumonia. Several authors have pointed out how difficult it is to diagnose pneumonia on the basis of signs and symptoms alone [4,5]. Some have shown that testing C-reactive protein (CRP) might provide added diagnostic value and support the general practitioner in detecting or ruling out pneumonia [6–8]. The diagnostic models from these elegant but small studies are yet to be validated in other populations but it does become more clear now that CRP has relevant diagnostic value in primary care.

Who might benefit from antibiotics? Feldman [1] correctly states that the average patient with acute bronchitis will not benefit from antimicrobial treatment; however, patients present in primary care with a wide variety of clinical pictures. Should we withhold antibiotics from young children or elderly patients who cough purulent sputum and have fever? The answer to this question is simply not known. As long as good studies in relevant subgroups of patients are lacking, any guideline in this field will be based partly on expert opinion rather than high grade evidence.

The other important issue for primary care physicians in managing these patients is implementation of evidence. While there are gaps in our knowledge, current guidelines and reviews like Feldman's provide substantial evidence-based advice that really should be implemented in daily practice. For example, healthy adults with an acute cough and no signs of pneumonia whatsoever should not be treated with an antibiotic; however, the majority of these patients do get this treatment in most European countries. Feldman rightfully emphasizes the importance of medical education, giving information to patients and shared decision making in this respect. Numerous studies, however, have pointed out that implementation of evidence-based medicine needs more than this [9]. Feedback of individual prescription rates, local engagement of GPs and pharmacists, academic detailing and public campaigns are also measures that should be considered essential if one is aiming at rational management of respiratory tract infections in primary care.

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