

COPD: a model for chronic respiratory disease

BPCO: il modello di una patologia respiratoria cronica

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Today COPD is the subject of both basic research and clinical studies aimed at seeking to better define its pathogenesis, diagnosis, natural history and therapy. Of equal importance are the pharmacoeconomic studies that carry out a cost/benefit analysis of all the measures necessary to control the disease at the different stages of its evolution.

In the early sixties the interest of pneumologists and microbiologists was focused on chronic bronchitis, the first of the bronchial diseases in which, thanks to antibiotics, subjects managed to overcome several episodes of acute lower respiratory tract infections and survive. Subsequently the definition of COPD expanded to include other bronchopulmonary pathologic conditions, such as emphysema, bronchiectasis and chronic asthma, characterized by chronic evolution.

Today the control of all these pathologies is global and standardized following the recommendations of guidelines, consensus conferences or papers and other national and international documents.

The first important step in COPD prevention is the control of air pollution – particularly in large centers and metropolitan areas – and the reduction of indoor pollutants combined with the campaign against tobacco smoking and all toxic fumes, including those of occupational origin, in diverse environments. Here, the epidemiological data provided by health authorities are of fundamental importance (attention should be paid to the diagnosis of COPD as the main disease!) in order to know which metropolitan areas are the most affected and investigate the cause.

Last but not least comes the patient.

An early diagnosis of the disease is of fundamental importance. Some steps need to be rigorously followed in order to improve the course of the disease: early diagnosis should be accompanied by an accurate definition of the clinical and functional disease status; follow up is necessary to verify the effect of

prescribed drugs as well as of other therapeutic measures; assessment and control of complications requires careful management carried out, if needed, in hospital.

What methodology should be used? Medical education and regular postgraduate courses for GPs, who represent the front line in the control of all diseases and in screening of the general population.

Of course, when the GP first comes to suspect the disease, he should refer the patient to the specialist to have the diagnosis confirmed and to define the patient's clinical and functional status. After receiving recommendations on the therapeutic course to follow, the GP should follow the patient to observe the effect of drugs and verify the results: in any case he should submit the patient to specialist control. Careful follow up on the part of the GP and subsequent specialist assistance makes it possible to monitor the natural history of the disease in the single patient and, if necessary, take appropriate measures. Also the eventual hospital admission in the advanced stages of the disease, when home treatment is no longer possible, must take place as soon as possible.

COPD cannot be cured: it is possible, however, to modify its natural history by means of prompt and efficacious therapeutic measures. This goal will be reached when there is a full collaboration existing between patient, GP, specialist, laboratory and hospital centers.

Not all patients respond to different therapies in the same way. Hopefully, while waiting for pharmacogenomics to indicate for us the real “non responders” to different treatments, on the basis of common sense it is advisable to use what is currently available in the most appropriate way according to the stage of the disease: i.e. drugs belonging to different classes, physiotherapy, oxygen therapy, etc. If interventions are early and appropriate, it is obvious that there will be an economic benefit also for the

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community as a whole, considering the growing incidence of COPD in the general population and the

impact that this trend has on the family and on the work environment.