Editorial

COPD: The Hunt for the Right Classification☆

EPOC: en busca de la clasificación ideal

Francisco Ortega Ruiz,* Eduardo Márquez Martín, José Luis López-Campos

Unidad Médico-Quirúrgica de Enfermedades Respiratorias, Hospital Universitario Virgen del Rocío/Universidad de Sevilla, Centro de Investigación Biomédica en Red de Enfermedades Respiratorias (CIBERES), Instituto de Salud Carlos III, Madrid, Spain

It is becoming clear that chronic obstructive pulmonary disease (COPD) is a multidimensional entity, and for this reason limiting its evaluation to functional changes does not address the full complexity of the disease. This realization has given rise to various proposals for classification that combine different parameters or "outcomes" in an attempt to qualify and/or quantify the degree of involvement and to assist in clinical decision-making.[1]

The task of classification involves grouping elements of information according to common attributes or properties. Defining a classification system, therefore, involves deciding, on the one hand, on which attributes the elements of the groups should be based, and on the other, how these attributes should be organized. With a good classification system, it should be possible to make an accurate qualitative identification of the patient and quantitatively assess their disease in order to adopt the most individualized therapeutic approach possible. It should have adequate predictive capacity and prognostic value, and it must be fast, practical and easy to use, and reduce the need for additional tests to a minimum.

Publication of the Global Strategy for the Diagnosis, Management, and Prevention of COPD (GOLD) guidelines, particularly the version which appeared in 2011, represented a significant change in the COPD diagnostic approach, clinical evaluation, and therapeutic strategy.[2] One of the main changes of the GOLD 2011 guidelines was to propose a multidimensional clinical assessment of the patient that went beyond the single-dimension approach of previous editions, which were based primarily on spirometric findings. Under the new system, 2 variables – severity of airflow limitation and frequency of exacerbations – are used to evaluate both the impact of symptoms on the patient's state of health and the risk of future adverse events.[3]

Nevertheless, studies pointing out contradictions began to appear soon after publication of the new stratification system. Compared to previous classifications, the new GOLD system revealed an irregular distribution of patients. Of course, results depend on the study population, but even so, the new GOLD tended to polarize patients, with shifts towards groups A and D.[4–8] These results are confirmed in the paper published in this edition of Archivos de Bronconeumología.[9] In the PUMA study, the authors compared the prevalence and distribution of COPD stages defined by the GOLD recommendations with those of the Latin American Thorax Association (ALAT)[10] in a primary care population. Using the latter system, patient distribution is bell-shaped, and a larger number of patients fall in the intermediate or "moderate" areas, while with the GOLD criteria, the distribution is U-shaped, with clusters of patients at the extremes.

It is logical that discrepancies will be found when comparing 2 different systems. Lack of standardization in the distribution of severity between 2 classifications is mainly due to different cut-off points, and highlighting the limited concordance between the 2 does not imply the superiority of one system over another.

More worrying are the other limitations demonstrated by the GOLD classification. Some studies revealed the surprising fact that mortality was significantly greater among subjects in group B (low risk, more symptoms) than in group C (high risk, fewer symptoms), at least in the short term.[6,7] The difference in survival between groups B and C remained statistically significant after age and sex were included in the model. Moreover, a similar trend in hospital admissions was observed, with a greater risk of hospitalization in group B than in group C. If these findings are investigated further, the clinical outcomes appear to vary in groups C and D, depending on the criteria on which the classification is based. Thus, mortality appears to be higher when a low FEV_1 is used to assign the patient to a group, but is far lower when the criteria is exacerbations.[6] This diversity in the results within a single group casts serious doubts on the use of a standard therapeutic strategy for all of these patients in that group. In the PUMA study, where the ALAT stratification was used, BODE index scores increased as COPD worsened, a finding not observed with the GOLD criteria: BODE index, then, may be a better indirect method of estimating prognosis.[9]

To analyze the prognostic value of a classification system, prospective studies, as yet unavailable, are needed. In general, studies have subsequently applied the new stratification criteria to previously published cohorts, a technique subject to numerous biases. The new classification also involves new therapeutic strategies, and several years of clinical application are needed before a proper evaluation and assessment of its true prognostic impact can be made.

An updated version of the GOLD guidelines has been published recently, which attempts to eliminate the discrepancies of the previous version by proposing a new patient classification and evaluation system.[11] This, in short, involves separating the degrees of spirometric involvement of the "ABCD" groups and looking exclusively at symptoms and history of exacerbations. This clearly simplifies patient classification, although lung function is excluded from therapeutic decision-making, and the assessment becomes exclusively clinical. It seems that in less than 10 years, our focus has shifted: COPD was initially defined as a mere functional obstruction but now lung function is being sidelined, to the extent that its benefit in patient control and progress is being downplayed. Only time and comparative studies, which no doubt will be undertaken, will clarify the utility of this new proposal.

With regard to the Spanish COPD guidelines (GesEPOC),[12] no prospective studies have compared the concordance of these classifications and their prognostic value with other recommendations. One of the strong points of the GesEPOC guidelines is that they recognize and emphasize the complexity of COPD by developing different profiles and promoting a multidimensional evaluation of the severity of the disease.[13] In principle, it is a more complex classification based on the recognition of different phenotypes and levels of severity based on the BODE index. We do not know how far they have been adopted in our setting, but if we look at the results of the "COPD observatory", a survey on COPD treatment guidelines sponsored by SEPAR, only 39.8% of respondents rated severity classification according to GesEPOC as easy or very easy; information was available on the 6-min walk test in 44.8% of cases, and on the CAT questionnaire in 51.7%, suggesting that GesEPOC use is not as widespread as might be hoped.[14]

Designing a strategy that is easy to use in different healthcare situations and that encompasses the main aspects of a disease as complex as COPD seems to be far from easy. Only in recent years have we begun to understand the natural history of this disease.[15] Deeper insight into its course and its impact on clinical and biological parameters will give us the data we need to recommend useful strategies that come close to the real world situation in the clinic.

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