203. GOLD guidelines 2011: new assessment of COPD

1644 GOLD 2011: Combined COPD assessment of patients from the European health-related quality of life study

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The 2011 Global Initiative for chronic obstructive lung disease (GOLD) guidelines recommend a combined assessment for measuring the impact of COPD which considers current symptoms and future exacerbation risk (A: low risk, less symptoms; B: low risk, more symptoms; C: high risk, less symptoms; D: high risk, more symptoms). Two symptom cut-points are proposed: COPD Assessment Test (CAT) score ≥10 and modified Medical Research Council Dyspnea (mMRC) score ≥2. This analysis examined health status scores split by these cut-points, using CAT and mMRC data together with SGRQ and SF-12 Physical Function (PC) scores, in a primary care population from the Health Related Quality of Life in European COPD Study.

Data from 1,817 patients (mean [SD] FEV1 1.6 [0.6] L; age 64.9 [9.6] years; males 72%) could be used. The SGRQ and SF-12PC scores are tabulated. The mMRC and CAT scores performed well for distinguishing patients based on exacerbation risk (A: low risk, less symptoms) versus (B: low risk, more symptoms; C: high risk, less symptoms; D: high risk, more symptoms). The distribution of low symptom patients into low risk and high risk categories differed. Patients categorised by mMRC as having low symptoms (Groups A & C) had much higher SGRQ scores (differences differed). Patients categorised by mMRC as having low symptoms versus 17.2% with the CAT.

Conclusions: The mMRC cut-point of ≥2 classified a high proportion of these patients as having low symptoms, despite having moderately high SGRQ scores and poor SF-12 PC scores.

1645 Prediction of the clinical course of COPD using the old and the new GOLD classification

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Using data from The Copenhagen General Population Study and The Copenhagen City Heart Study comprising more than 50,000 individuals, we identified 6,628 individuals who met criteria were classified as C or D based on mMRC and the worse of FEV1 or exacerbation history categories.

Results: Of 4,475 subjects, 33.8%, 20.9%, 8.3% and 41.0% were classified as GOLD A, B, C and D respectively, and either FEV1 <50% or ≥1 exacerbation in the prior year; “B” mMRC ≥2, FEV1≥50% and ≤1 exacerbation; “C” mMRC ≤1, FEV1<50% and ≥2 exacerbations; and “D” mMRC ≥2, FEV1<50% and ≥2 exacerbations. Per guidelines, subjects not meeting these criteria were classified as C or D based on mMRC and the worse of FEV1 or exacerbation history categories.

Conclusions: A relatively small proportion of subjects met criteria for grade C suggesting patients with low FEV1 and frequent exacerbations but mild dyspnea are less common. While subjects within grades C and D have similar dyspnea severity, they are quite dissimilar with respect to other markers of disease severity.

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The mMRC cut-point of ≥2 classified a high proportion of these patients as having low symptoms, despite having moderately high SGRQ scores and poor SF-12 PC scores.

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Using data from The Copenhagen General Population Study and The Copenhagen City Heart Study comprising more than 50,000 individuals, we identified 6,628 persons older than 40 years of age with spirometrically defined COPD (FEV1/FVC ratio below 0.7 and no asthma). These individuals were subdivided according to the GOLD 2007 into stages 1, 2 and 3 (based on spirometry only) and according to the GOLD 2011 (using spirometry, mMRC-dyspnea scale and the number of exacerbations in the previous year) into stages A, B, C and D. They were followed for the subsequent year with regard to important COPD outcomes.

Conclusions: 1. The distribution of the individuals according to the two stratifications differs considerably
2. With regard to prediction of exacerbations, the A-D GOLD 2011 classification performs well
3. Compared with the group D, the lack of symptoms in group C is, not surpris-ingly, associated with lower frequency of treatment with inhaled medications, but also with a slightly higher frequency of exacerbations.
4. Presence of dyspnea and a low level of FEV1 are both predictors of high risk of hospitalisation/casualty ward visit due to COPD, whereas dyspnea seems to be a better predictor of all cause mortality than FEV1.
The combined assessment according to the new GOLD guidelines is groups A (10%), B (6%). Remarkably, mortality was lowest in group C (0%) among the 4 groups. Mortality was highest in the group D (12%) followed by severe exacerbation rate (p<0.0001), 6 MWD (p<0.0001), circulating proa-

Differences in the recommended initial therapy of COPD according to GOLD guidelines 2006 and 2011

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Background: The last GOLD Guideline revision was released in late 2011. We hypothesized that newer GOLD guidelines would frequently lead to a different initial treatment choice.

Aims and objectives: To demonstrate the magnitude of difference in recommended initial treatments in COPD patients based on past and recent GOLD revisions.

Methods: We retrospectively analyzed 52 patients with first diagnosed stable COPD. Spirometry, GOLD Assessment Test and evaluation of exacerbations were done. Patients were allocated to the most appropriate treatment according to GOLD 2006 and 2011 management scheme.

Results: According to GOLD 2006 criteria 32 (61.5%), 18 (34.6%) and 2 (3.8%) patients were stage II, III and IV, respectively. Forty (76.9%) patients should be prescribed monotherapy with LABA or ICS/LABA therapy. According to GOLD 2011 6 (11.5%), 19 (36.5%), 2 (3.8%) and 25 (48.4%) patients were Group A, B, C and D, respectively. Thus, 6 (11.5%) patients would not be prescribed long-acting bronchodilators (BD) as initial therapy, 20 (38.5%) patients required monotherapy with long-acting BD and 26 (50.0%) required therapy with ICS/LABA. In accordance with GOLD 2011 treatment scheme, initial therapy was required to be changed in 21 (40.4%) patients (13 (40.6%) stage II and 8 (40%) stage III/IV). In 6 (11.5%) cases we had to administer more "light" therapy (with short-acting BD instead of long-acting BD), and 14 (26.9%) patient required more intensive treatment, usually LABA/ICS instead of monotherapy.

Conclusions: In significant proportion of COPD patients GOLD 2011 treatment scheme leads to another, generally more intensive, initial treatment.

1650 GOLD assessment of COPD patients: Impact of symptoms assessment choice

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Background: The 2011 GOLD guidelines recommend combined GOLD assessment using symptoms (modified Medical Research Council Dyspnoea [mMRC] ≥ 2 or COPD Assessment Test [CAT] ≥ 10) combined with a history of exacerbations in the past 12mo. We studied the differences in the response of GOLD III and IV patients when assessed with mMRC vs. CAT.

Objectives: To determine the impact of different symptom assessment tools on GOLD assessment of COPD patients according to the GOLD 2011 guidelines.

Methods: GOLD patients (n=106) were included. Spirometry, evaluation of exacerbations were done. Patients were classified into GOLD severity by mMRC and CAT. GOLD severity classification by mMRC and CAT was compared with GOLD severity according to GOLD 2006.

Results: Among the 106 patients, 54 (50.9%) patients were classified as GOLD III and 52 (49.1%) patients as GOLD IV. For the GOLD III patients, 27 (49.1%) patients were classified by mMRC and 31 (57.7%) patients were classified by CAT. For GOLD IV patients, 22 (42.3%) patients were classified by mMRC and 21 (40.4%) patients were classified by CAT.

Conclusions: Both mMRC and CAT were used to accurately classify GOLD III patients. There was a tendency to less severe GOLD IV patients for CAT. These different symptom assessment tools may lead to different therapeutic decision making.

1651 Comparison of modified Medical Research Council (mMRC) dyspnoea scale cut point ≥ 1 with COPD assessment test (CAT) ≥ 10 to differentiate low and high symptom COPD patients

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The GOLD 2011 guidelines recommend categorising patients into: A: low risk, less symptoms; B: low risk, more symptoms; C: high risk, less symptoms; D: high risk, more symptoms. A CAT score ≥ 10 or mMRC score ≥ 2 are proposed for categorising symptoms. A recent analysis suggests that the mMRC places more severe patients in the 'less symptom' categories than the CAT (Adamek et al, ERS 2012). This analysis compared health status scores split by CAT ≥ 10 or mMRC ≥ 2, using St George’s Respiratory Questionnaire (SGRQ) and short form health survey (SF-12).
Data from 1817 patients (mean [SD] FEV$_1$ 1.6 [0.6] L; age 64.9 [9.6] years; males 72%) were used. The CAT classified 17.2% of patients as low symptom (GOLD A+C) vs. 18.9% by mMRC. SGRQ scores in the mMRC low symptom groups were slightly higher than those classified by CAT. The distribution of low symptom patients into low risk and high risk categories differed.

<table>
<thead>
<tr>
<th>Patient Group</th>
<th>CAT (≥ 10)</th>
<th>mMRC (≥ 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Patients n (%)</td>
<td>DORQ mean±SD</td>
</tr>
<tr>
<td>A</td>
<td>40 (2.2)</td>
<td>25.9±6.3</td>
</tr>
<tr>
<td>B</td>
<td>227 (12.5)</td>
<td>50.6±16.9</td>
</tr>
<tr>
<td>C</td>
<td>273 (15.5)</td>
<td>31.6±10.7</td>
</tr>
<tr>
<td>D</td>
<td>1271 (69.8)</td>
<td>49.5±17.5</td>
</tr>
<tr>
<td>Missing</td>
<td>7 (0.4)</td>
<td>-</td>
</tr>
</tbody>
</table>

The mMRC cut-point of ≥ 1 identifies a group of low symptom patients who have similar health status to those classified by CAT but are not directly equivalent. The small differences in classification of patients using CAT or mMRC ≥ 1 may influence treatment in only a very small proportion of patients.