



Clinical Champion Update

Date: 7/10/23

Subject: COPD

Gold guidelines have been updated for 2023. Below is the link to the new guidelines, you can download it for free.

<https://goldcopd.org/2023-gold-report-2/>

Tables and figures (attached) are copied from GOLD 2023 teaching slides, we are allowed to share for teaching purposes.

Working with Martha M. and Dr. Gump we have updated COPD template in Athena.

Make sure to please use the new **COPD-ep template**. If an old template is brought over, please make sure it has the ABE classifications (2023 classification) and not ABCD (2022 classification).

Key changes relevant to our daily work (can read the entire list on above link):

- 1- **Proposed taxonomy** based on etiology (etiotypes) of COPD (table 1.1).
- 2- **New definition of COPD**, Chronic Obstructive Pulmonary Disease (COPD) is a heterogeneous lung condition characterized by chronic respiratory symptoms (dyspnea, cough, sputum production and/or exacerbations) due to abnormalities of the airways (bronchitis, bronchiolitis) and/or alveoli (emphysema) that cause persistent, often progressive, airflow obstruction.
- 3- Clinical relevance of exacerbations, independent of the level of symptoms, leading to **ABE** classification (figure 2.3).
- 4- GOLD grades 1-4 and mMRC scale remain the same (tables 2.6 and 2.7) but **ABCD assessment tool has changed to ABE**, C and D were combined into E to recognize the clinical relevance of exacerbations, independent of the level of symptoms (figure 2.3).
- 5- **Indications for CT scan** for stable COPD (table 2.8).

- 6- **Change in criteria for adding ICS in COPD**, as regular treatment with ICS in COPD increases the risk of pneumonia especially in those with severe disease (figure 3.1).
If a patient with COPD and no features of asthma has been treated – for whatever reason – with LABA+ICS and is well controlled in terms of symptoms and exacerbations, continuation with LABA+ICS is an option. Yet, if the patient has a) further exacerbations, treatment should be escalated to LABA+LAMA+ICS; b) major symptoms, switching to LABA+LAMA should be considered. Also change in initial treatment of group B and E (figure 4.2).
- 7- Vaccinations updated to include **Prevnar 20** in line with current CDC guidelines (figure 3.2).
- 8- **Differential diagnosis of COPD** added to include possible causes of symptoms (table 2.3).
- 9- **New definition of COPD exacerbation**, An exacerbation of chronic obstructive pulmonary disease (ECOPD) is defined as an event characterized by increased dyspnea and/or cough and sputum that worsens in < 14 days which may be accompanied by tachypnea and/or tachycardia and is often associated with increased local and systemic inflammation caused by infection, pollution, or other insult to the airways.

COPD Diagnosis:

In the appropriate clinical context, the presence of non-fully reversible airflow limitation (i.e., **FEV1/FVC < 0.7 post-bronchodilation**) measured by spirometry confirms the diagnosis of COPD.

- Some individuals can have respiratory symptoms and/or structural lung lesions (e.g., emphysema) and/or physiological abnormalities (including low-normal FEV1, gas trapping, hyperinflation, reduced lung diffusing capacity and/or rapid FEV1 decline) without airflow obstruction (FEV1/FVC \geq 0.7 post-bronchodilation). These subjects are labelled 'Pre-COPD'. The term '**PRISm**' (Preserved Ratio Impaired Spirometry) has been proposed to identify those with normal ratio but abnormal spirometry. Subjects with Pre-COPD or PRISm are at risk of developing airflow obstruction over time, but not all of them do.

KEY POINTS:

- A diagnosis of COPD should be considered in any patient who has dyspnea, chronic cough or sputum production, a history of recurrent lower respiratory tract infections and/or a history of exposure to risk factors for the disease, but **forced spirometry showing the presence of a postbronchodilator FEV1/FVC < 0.7 is mandatory to establish the diagnosis of COPD.**
- **The goals of the initial COPD assessment** are to determine the severity of airflow obstruction, the impact of disease on the patient's health status, and the risk of future events (such as exacerbations, hospital admissions, or death), to guide therapy.
- **Additional clinical assessment**, including the measurement of lung volumes, diffusion capacity, exercise testing and/or lung imaging may be considered in COPD patients with persistent symptoms after initial treatment.
- **Concomitant chronic diseases (multimorbidity) occur frequently in COPD patients**, including cardiovascular disease, skeletal muscle dysfunction, metabolic syndrome, osteoporosis, depression,

anxiety, and lung cancer. These **comorbidities should be actively sought, and treated** appropriately when present, because they influence health status, hospitalizations, and mortality independently of the severity of airflow obstruction due to COPD.

When to check DLCO:

DLco should be measured in any person with symptoms (dyspnea) disproportionate to the degree of airflow obstruction since reduced DLco values < 60% predicted are associated with increased symptoms, decreased exercise capacity, worse health status, and increased risk of death, independently of the severity of airflow obstruction and other clinical variables. Additionally, in COPD patients, low DLco values help preclude surgical lung resection in patients with lung cancer while in smokers without airflow obstruction, values < 80% predicted (as a marker of emphysema) signal an increased risk for developing COPD over time.

When to check ABG:

Consider **ABG** for Gold 3 and definitely for GOLD 4 to check for hypercapnia. Also when O2 sat below 92 on RA and for hypercapnia assessment.

Thanks,

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