



GOLD guidelines on COPD Diagnosis and Management: 2013 Update

Has been published the 2013 update of the GOLD guidelines of 2011

The definition has been updated and made more accessible to allow a better applicability.

According to the new definition, the diagnosis of COPD should be considered in all patients who have:

- shortness of breath,*
- persistent cough,*
- overproduction of mucus*
- history of exposure to known risk factors for the disease (smoking, exposure to fumes or dust for occupational reasons)*
- family history of COPD*

Spirometry is considered to be decisive for the diagnosis and staging of pathology.

The spirometric parameter to which referere in the diagnosis is the ratio of FEV1 and FVC.

FEV1 alone proved to be insufficient to identify a good number of cases.

COPD is diagnosed with an FEV1/FVC less than 0.70 after administration of inhaled bronchodilators.

From the pathophysiological point of view is emphasized the importance of flow-limitation and air trapping in the genesis of exertional dyspnea for the reduction of CFR.

The reduction in alveolar ventilation and in alveolar surface leads to hypoxemia associated with hypercapnia, which is the framework emogasanalitic characteristic of COPD.

The FEV1/FVC ratio is also used to determine the level of severity of the disease abandoning the old staging based on only FEV1.

4 degrees of spirometric severity were indentified:

GOLD 1 mild FEV1/FVC \geq 80% of the expected

GOLD 2 moderate FEV1/FVC <80% of the expected

GOLD 3 severe FEV1/FVC <50% of the expected

GOLD 4 very severe FEV1/FVC <30% of the expected

The new definition for COPD exacerbations is:

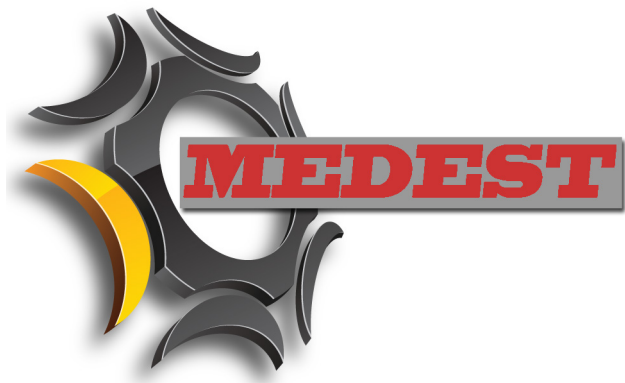
Event characterized by acute worsening of dyspnea in addition to those that the patient perceives as normal fluctuations of the daily clinic.

They are often caused by infections of the upper airways and of the tracheobronchial tree with a predominantly viral etiology.

The drug classes that had already been indicated in 2011 guidelines are confirmed as effective in the treatment of the disease.

Short acting beta agonists (SABA) associated or less with short-acting anticholinergics, are the drugs of first use, with the best and most rapid effects on clinical exacerbations, and therefore of greater interest in emergency medicine.





Methylxanthines are now universally recognized as second-line drugs to be reserved only for selected cases in which the treatment of first instance (SABA and anticholinergics) have failed.

The systemic corticosteroids and antibiotics instead, play an important role, even if at a later stage, on recovery time, early recurrences and on reducing hospital stay.

Regarding the oxygen therapy, the target saturation must be between 88% and 92% with administration through high flow systems and variable FiO₂.

Remain unchanged indications for treatment with NIV as well as those for invasive mechanical ventilation. In particular for the NIV treatment, we speak of arterial blood gas criteria but mostly of clinical criteria, that indicate the severity of dyspnea and exhaustion of the respiratory muscles, such as the use of accessory muscles, breathing paradox, jugular and intercostal spaces retraction .



