

EVALUATION OF PHARMACOLOGICAL TREATMENT FOR COPD IN THE ELDERLY CAUSED BY OCCUPATIONAL EXPOSURE TO TO RESPIRABLE CRYSTALLINE SILICA

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Introduction:

Chronic obstructive pulmonary disease (COPD) is one of the three leading causes of death worldwide. Besides tobacco smoking, occupational exposure such as respirable crystalline silica in mining is a risk factor. The main drug classes used for treatment are short- and long-acting beta2-agonists (SABAs, LABAs) and muscarinic antagonists (SAMAs, LAMAs) and inhaled corticosteroids (ICS). The choice depends on the severity of COPD and the clinical response.

Methods:

In our cross-sectional study of silica-exposed workers with suspected COPD, we assessed the accuracy of the diagnosis and the adequacy of pharmacological therapy. We evaluated the severity of airway obstruction (spirometry), workers' perceived symptoms (multidimensional COPD assessment test, CAT™) and history of exacerbations.

Results:

The median age of the 53 participants was 79.0 years (IQR 69.0; 83.0). The median FEV₁/FVC ratio (Z-score -1.36 (IQR -2.15; -0.40)) was reduced and significantly lower than the expected value (Z-score = 0; p < 0.0001). The CAT score (severe health impairment if CAT ≥ 10) was 25 (IQR 18; 32). LAMA + SAMA and LAMA + SAMA + ICS therapy was reported by 11 (21%) and 8 subjects (15%), respectively.

Conclusions:

There are still workers suffering from COPD who are not treated or are treated incorrectly.