



Editorial

 Living with COPD: Pain is Important Too[☆]

Vivir con EPOC: el dolor también cuenta

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Chronic obstructive pulmonary disease (COPD) is a major cause of morbidity and mortality worldwide and is associated with a significant socioeconomic burden, which is expected to increase in coming decades due to continuous exposure to risk factors and the aging of the population. The most common symptoms experienced by people with this disease are dyspnea, cough, and chronic sputum production.¹ Recent studies have found that pain is also a major symptom in these patients, reported by between 21% and 82% of patients.²

Pain is more frequent and severe in subjects with COPD compared with healthy adults.³ The potential mechanisms that can cause, contribute to, or maintain this symptom in individuals with COPD include the following: mechanical limitations of the movement of the chest wall as a result of hyperinflation, musculoskeletal disorders, postural deviations, osteoporosis, compression fractures, vertebral deformations, costovertebral arthropathy, side effects of prolonged use of steroids, presence of comorbidities, such as anxiety or depression, and certain individual characteristics, such as gender and socioeconomic factors.²

Lower back pain is the most commonly reported site of involvement in patients with COPD, and musculoskeletal conditions are the most common etiology.³ However, other authors have reported that the neck, trunk, and limbs are also frequently involved in these patients.^{2,4} Although migraine has been less studied, previous studies have confirmed its association with COPD.³ The combination of hypoxemia, hypercapnia, and sleep disorders may influence the onset of migraine in these patients.⁵

A recent study has highlighted the influence of age, sex, blood pressure, and obesity in some types of pain suffered by patients with COPD.³ Rustøen et al.⁶ also found that a younger age and female sex, in association with other factors, such as a lower level of education, living alone, and unemployment, are associated with the existence of chronic pain. Furthermore, it has been reported that chronic pain is more common in women than in men, and

that women also report more intense pain. This difference may be explained by neuroimmunological, hormonal, genetic and psychosocial factors, proposals that are supported by the evidence.⁷ Questions have also been raised as to whether men and women construct different meanings around pain, which may influence the way they report their experience of this symptom.⁸

Arterial hypertension has also been associated with the appearance of chronic lower back pain and migraine in patients with COPD. The possible mechanisms that may explain this relationship include hyperactivity of the sympathetic nervous system, hypersensitivity to baroreceptors, and α -2 adrenergic inhibition.³

The association between body mass index and some types of pain has been established in some studies.³ Borge et al.⁹ found that individuals with COPD who experience pain have a higher body mass index than those without pain. Obesity has been shown to increase the prevalence of pain, as it is accompanied by raised inflammatory markers and increases the risk of osteoarthritis and lower back pain.¹⁰ Pain may also increase the risk of obesity by reducing physical activity or inducing hormonal changes.³

A greater intensity of pain in patients with COPD has been associated with increased dyspnea, reduced exercise capacity, poorer quality of life, and a greater number of specific comorbidities.³ In fact, patients with COPD and pain more often receive treatment with short-acting β -2 adrenergic agonists and oral steroids than those without pain.¹¹ Pain can also contribute to the clinical deterioration of these patients and interfere in their activities of daily living, which may explain in part the lower scores observed in the physical component of health-related quality of life questionnaires.¹² These factors all add up to a vicious circle of pain, dyspnea, sleep disorders, anxiety, and depression that can exert negative effects on the quality of life of patients with COPD.³

A recent study revealed that more than 50% of COPD patients have taken pain medication during the last month.³ Roberts et al.¹³ also showed that patients with COPD have a substantially greater use of analgesics and procedures related to pain than individuals with many other chronic diseases. Moreover, prescription data of ambulatory patients suggest that many subjects with COPD use long-term opioid analgesics, although it is unclear whether this use is related to refractory dyspnea or pain control.¹⁴ Total direct med-

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ical costs have been shown to be more than double among patients with COPD with chronic pain compared to those who suffer from the disease but do not show this symptom.¹⁵

As has been seen, chronic pain is common among COPD patients and exerts a negative impact on the degree of dyspnea, physical activity, mood, and quality of life of these patients.² The most frequent causes of pain, and as such, those that may have a greater clinical impact, are musculoskeletal, often affecting the lumbar area, as described above. It is important to both recognize and correctly treat pain in clinical practice. It should therefore be included in the comprehensive evaluation of symptoms, as part of the clinical care of patients with COPD.

However, few clinical practice guidelines for the management of COPD address this symptom. Indeed, when pain is mentioned, it is usually in the context of adverse reactions to specific drugs. Furthermore, guidelines that do provide recommendations or strategies on the assessment of pain are usually referring to differential diagnoses or pain management in advanced COPD or palliative care settings.²

These findings open up new perspectives in the clinical management of COPD patients. There is now sufficient evidence available on the prevalence of pain to justify the inclusion of chronic pain in COPD clinical practice guidelines.²

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