Beta-blockers could be used to reduce the risk of chronic obstructive pulmonary disease (COPD) exacerbations, according to new findings. Beta blockers are primarily used to treat stress or heart problems, such as high blood pressure and angina, but these new findings suggest they could have a potential benefit for patients with COPD.

COPD exacerbations involve a worsening of symptoms, in particular increased breathlessness. Although beta blockers are suspected to tighten the muscles in the airways, contributing to breathing problems, previous research has suggested beneficial effects of ß-blocker use in patients with COPD. This study aimed to understand this link and to analyse if any potential benefit on exacerbations existed for COPD patients taking the drug.

The research, presented today (12 March, 2016) at the European Respiratory Society's Lung Science Conference, analysed health records of 1,621 COPD patients included in the Rotterdam Study. Patients were followed until an exacerbation occurred and researchers collected data on the use of different kinds of beta-blockers and whether the patient also experienced heart failure.

The findings revealed that the use of cardio selective beta-blockers, which are primarily used to treat heart disease, reduced the relative risk of exacerbations by 21%. The benefits were increased for patients with heart failure who saw a reduced risk of 55%.

Lies Lahousse, lead author and FWO postdoctoral fellow from Ghent University Hospital in Belgium, commented: “The overlap in symptoms and risk factors associated with lung and heart disease can be complicated and we know that a reduction in lung function is also associated with a reduction in heart function. These preliminary findings offer a useful insight into the potential benefits of beta-blockers for patients living with heart disease at the same time as COPD. If randomised controlled trials confirm our findings, we could see promising clinical implications.”

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