
Lung alert

Revival of carbocisteine for prevention of COPD exacerbations

This Chinese multicentre double-blind study assessed whether carbocisteine, a mucolytic agent with antioxidant and anti-inflammatory properties, could reduce exacerbation rates in patients with chronic obstructive pulmonary disease (COPD). A total of 709 patients with COPD were randomised to receive 1500 mg carbocisteine or placebo daily for 1 year. The patients were aged 40–80 years with a spirometric diagnosis of COPD and at least two COPD exacerbations in the preceding 2 years. The primary end point was exacerbation rate over 1 year.

A significant decline in the number of exacerbations per patient per year was observed independent of smoking status or GOLD staging with significant improvements in quality of life (QOL). There were also statistically significant differences in primary outcome emerging at 6 months of treatment, which was well tolerated with no serious side effects. No change in ventilatory capacity was observed.

This was a well-conducted and worthwhile study as many previous studies have been inconclusive and underpowered. Although the study needs to be replicated in other ethnic groups, it has demonstrated the efficacy of continual use of carbocisteine in reducing exacerbations and improving QOL in a Chinese population with predominantly moderate COPD. By reducing exacerbations, carbocisteine has the potential to reduce significant healthcare costs and, being cheaper than conventional therapy, it may be an important option in low-income countries.


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