HOME OXYGEN THERAPY

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Available online 27 June 2005.

Long-term oxygen therapy (LTOT) has been shown to be of substantial benefit in the management of patients with advanced chronic obstructive pulmonary disease (COPD) and chronic hypoxemia. Two multicenter studies of home oxygen therapy (HOT) for COPD patients with hypoxemia demonstrated increased survival that is greatest when oxygen is provided nearly continuously, as opposed to nocturnal oxygen or oxygen for shorter periods of time during the day.\textsuperscript{33} and \textsuperscript{41} In addition to increased survival, LTOT results in an improved quality of life that includes increased exercise tolerance and enhanced neuropsychiatric function.\textsuperscript{14, 26, 32, 40} and \textsuperscript{45} Physiologic improvements may include a reduction in pulmonary artery pressure, attenuated progression of pulmonary hypertension, and reduced hematocrit when erythrocythemia is present.\textsuperscript{1, 30, 33, 40} and \textsuperscript{43} It is also notable that no medication other than oxygen has been demonstrated to increase survival in such patients, although other drugs are useful to help improve quality of life.\textsuperscript{3}

Estimates of the magnitude of use of home oxygen in the United States, based on Medicare data of 1993, indicate that 616,000 patients are receiving home oxygen, at an annual cost of \$1.4 billion.\textsuperscript{37} The overall incidence of use of HOT in the United States was 241 per 100,000 persons. The cost of HOT in the United States in 1993 exceeded the entire annual budget of the National Heart, Lung and Blood Institute. It is not surprising, therefore, that the Health Care Financing Administration (HCFA), which funds Medicare, has attempted to establish very specific indications for reimbursement and has continuing concerns about the level of payment and possible abuse of this therapy.

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Clinics in Chest Medicine
Volume 18, Issue 3, 1 September 1997, Pages 535-545