Postoperative Course in a Patient with Severe Chronic Obstructive Pulmonary Disease Who Successfully Underwent Lung Volume Reduction Surgery

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Abstract: A 60-year-old male complaining of exertional dyspnea was admitted to Fukuoka University Hospital. The diagnosis was determined to be very severe COPD. Appropriate medication was started, but the patient's respiratory function nevertheless worsened. Since his respiratory function was severe enough to meet the criteria for LVRS based on the findings of a NETT study, LVRS was therefore performed. The FEV_{1.0} markedly improved 2 months after LVRS. Although, the FEV_{1.0} thereafter gradually declined, it still maintained levels over the preoperative ones and the patient's 6-minute walking distance was also longer at 3 years after LVRS than before surgery. LVRS is thus considered to be beneficial to patients with very severe COPD if the candidates for LVRS are very carefully selected.

Key words : Chronic obstructive pulmonary disease (COPD), Lung volume reduction surgery (LVRS), Respiratory function test, Six-minute walk test