Abstract

A 28-year-old neuromuscular patient chronically treated with nocturnal noninvasive ventilation developed pulmonary lobar atelectasis and daytime hypoxemia. Twenty-four-hour 5 L/min oxygen was begun, while mechanical cough assist aids were applied for seven days. In the following three days, treatment with nebulized Dornase alpha (rhDNase) b.i.d. was tested, without any significant improvement. On 11 and 13th days rhDNase was instilled by flexible bronchoscopy. A rapid resolution of the atelectasis was observed with relief of hypoxemia, without significant side effects. On day 16 the patient was discharged without oxygen requirements. In non-intubated neuromuscular patients with atelectasis who do not respond successfully to non-invasive treatments intrabronchial instillation of rhDNase may safely help to improve airway clearance.

Keywords

Dornase alpha, Neuromuscular diseases, Atelectasis.