

**Natureza do trabalho:** Resumo

**TÍTULO**

*EARLY MOBILIZATION IN A MECHANICALLY VENTILATED PATIENT WITH MYASTHENIA GRAVIS IN THE INTENSIVE CARE UNIT: CASE REPORT.*

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**RESUMO**

**Introduction:** Myasthenia gravis is an autoimmune disorder characterized by fluctuating muscle weakness and fatigue. The ocular, facial and bulbar muscles are most often involved. Respiratory muscle failure with need of mechanical ventilation is known as myasthenic crisis. **Objective:** The objective of this study was to report the effects of early mobilization and inspiratory muscles training in a mechanically ventilated patient with Myasthenia gravis (MG) in the Intensive Care Unit (ICU). **Case Report:** A forty-two years old woman was diagnosed with Myasthenia gravis two months before admission in intensive care unit. Dysphagia and respiratory symptoms such as persistent cough and dyspnea appeared seven days before admission. Despite treatment with levofloxacin, the respiratory symptoms worsened and she was referred to ICU. The patient showed dysphagia and dyspnea, without need of oxygen supplement. The patient also showed normal peripheral muscle strength. Twelve hours after admission in ICU she presented acute respiratory failure resulting in intubation and mechanical ventilation. The patient was ventilated with volume controlled ventilation and after daily sedation withdrawal she was ventilated with pressure support ventilation. The patient was treated with immunoglobulin along five days. After two days in mechanical ventilation the patient was extubated and was handled with non-invasive ventilation (NIV) due to the risk of failure in weaning. Maximal inspiratory pressure was  $-25\text{cmH}_2\text{O}$  and Tobin Index was 101. After 2 days using intermittent NIV the patient was re-intubated due to a new episode of acute respiratory failure. The patient received physical therapy treatment three times a day and was submitted to an early mobilization programme that included: joint mobilization techniques, active exercises, sitting in bed, balance exercises, gait training, cycle ergometer exercises and supervised walking. A progressive inspiratory muscle training programme was performed three times a day according to inspiratory maximal pressure evaluation. After nine days the patient was successfully extubated. Maximal inspiratory pressure was  $-45\text{ cmH}_2\text{O}$  and Tobin Index was 87. The patient was discharged from intensive ICU four days after extubation and seventeen days after admission. The patient was able to move in bed, stand up and walk short distances without help. Oxygen supplementation was not needed and dysphagia and dyspnea were absent. Maximal inspiratory pressure was  $100\text{ cmH}_2\text{O}$ . **Conclusion:** Early mobilization programme

associated with inspiratory muscles training facilitated mechanical ventilation weaning and functional performance. NIV did not avoid re-intubation in this case and this report suggest that it should be carefully indicated.

### **Acknowledgments**

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