Abstract

Objective: The aim of this study was to evaluate the effectiveness of implementing a physical therapy guideline for patients undergoing upper abdominal surgery (UAS) in reducing the incidence of atelectasis and length of hospital stay in the postoperative period. Materials and methods: A “before and after” study design with historical control was used. The “before” period included consecutive patients who underwent UAS before guideline implementation (intervention). The “after” period included consecutive patients after guideline implementation. Patients in the pre-intervention period were submitted to a program of physical therapy in which the treatment planning was based on the individual experience of each professional. On the other hand, patients who were included in the post-intervention period underwent a standardized program of physical therapy with a focus on the use of additional strategies (EPAP, incentive spirometry and early mobilization). Results: There was a significant increase in the use of incentive spirometry and positive expiratory airway pressure after guideline implementation. Moreover, it was observed that early ambulation occurred in all patients in the post-intervention period. No patient who adhered totally to the guideline in the post-intervention period developed atelectasis. Individuals in the post-intervention period presented a shorter length of hospital stay (9.2 ± 4.1 days) compared to patients in the pre-intervention period (12.1 ± 8.3 days) (p < 0.05). Conclusion: The implementation of a physical therapy guideline for patients undergoing UAS resulted in reduced incidence of atelectasis and reduction in length of hospital stay in the postoperative period.

Keywords

Physical therapy modalities, Early ambulation, Guideline, Pulmonary atelectasis, Hospitalization, Postoperative care