

Effect of Inspiratory Threshold Training on Diaphragmatic Strength After Upper Abdominal Surgeries; Karim Ibrahim Abu-Khalil Saafan; Supervisors: Prof. Dr. Mohammed Mahmoud Abdel Khalek Khalaf, Assist. Prof. Dr. Wael NaeemThabet, Dr. Eman Mohamed Othman, Faculty of Physical Therapy, Cairo University, Master Thesis 2013.

Abstract

The purpose: This study was conducted to investigate the effect of inspiratory threshold training on diaphragmatic strength after upper abdominal surgeries. Thirty patients (16 males and 14 females) underwent upper abdominal surgery with ages ranged from 20-40 years were selected randomly and divided into two equal groups in number each group contains 15 patients. Patients in **group (A)**: managed with inspiratory threshold training in addition to traditional chest physical therapy intervention (Deep breath, cough training and early ambulation) while patients in **group (B)**: received only traditional chest physical therapy intervention. Patients in both groups were assessed before treatment (pre-training) then after treatment (post-training) to measure maximal inspiratory pressure (MIP) using respiratory pressure meter (RPM). **Results:** The results of this study showed that inspiratory threshold training was an effective approach in treatment of diaphragmatic weakness as proved through significant increase in maximal inspiratory pressure (MIP). **Conclusion:** It was concluded that inspiratory threshold training was an effective modality in treatment of diaphragmatic weakness.

Key Words: (Inspiratory threshold training, Maximal inspiratory pressure, Abdominal surgeries, Diaphragm).