Fayoum University
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Evaluation of diaphragm in chronic obstructive pulmonary disease patients using ultrasonography in relation to disease severity

Thesis

Submitted for partial fulfillment of Master Degree of Chest Diseases and Tuberculosis

BY

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الملخص الانجليزي

The thesis aims to assess the diaphragm in COPD patients by using ultrasound and study its relationship to the severity of the disease, because COPD can cause changes in the structure and function of the diaphragm. Ultrasound is one of the techniques used to evaluate the structure and function of the diaphragm.

The diaphragm is the main muscle used in breathing.

This study included forty patients with COPD who were diagnosed and classified into four groups.

The following was done: history taking, complete clinical examination, spirometry, chest x-rays, 6-minute walk test and using ultrasound to measure the excursion, diaphragmatic thickness and thickness fraction.

The study concluded a difference in excursion, diaphragmatic thickness and thickness fraction between COPD patients and healthy people, with fewer values in COPD patients.

The thesis also concluded a difference in excursion, diaphragmatic thickness and thickness fraction between the different grades of COPD patients.