EARLY DETECTION OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE AMONG HIGH RISK SMOKERS USING SPIROMETRIC SCREENING IN FAYOUM GOVERNORATE

Thesis

Submitted for the partial fulfillment of
Master Degree in Chest diseases & Tuberculosis

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Introduction:

COPD is a disease state characterized by airflow limitation that is not fully reversible .

The airflow limitation is usually both progressive and associated with an abnormal inflammatory response of the lung to noxious particles or gases (GOLD, 2007).

COPD is currently the fourth leading cause of death in the world and further increase in the prevalence and mortality of the disease can be predicted in the coming decades (Miravetlles et al, 2003).

More than 90% of cases of **COPD** are caused by tobacco smoke; the reminders are attributable to other causes as air pollution, occupational, respiratory infections and genetic factors (Rennard et al, 2000).

A diagnosis of **COPD** should be considered in any patient who has symptoms of cough, sputum production or dyspnea, and /or history of exposure to risk factors for the disease.

The diagnosis is confirmed by spirometry. The presence of a post-bronchodilator FEV□/FVC < 70% confirm the presence of airflow limitation that is not fully reversible (Coultas et al, 2001).

COPD usually is diagnosed late in its natural course. The national heart, lung and blood institute survey, demonstrated that 63% of patients with severe and very severe **COPD** had no prior or current diagnosis of obstructive lung disease (Mannino et al, 2000).

For many years, the early symptoms (i.e. chronic cough and sputum production) are usually neglected. Most often, a patient is inclinated to seek medical advice when he become dyspneic. By that time, more than half of patients ventilatory reserves are irreversibly lost (Ergrson et al, 2000).

Because of the increase in prevalence and mortality of COPD, and its high medical costs, it is important to identify patients and to treat them before they reach the symptomatic, irreversible and costly stages of the disease.

Aim of the work:

The aim of the present study is to evaluate the efficacy of spirometric screening for the early detection of airflow obstruction in high-risk smokers.

Patients and methods:

Two hundred smoking volunteers among visitors in different general hospital in Fayoum governorate who ≥40 years of age with a smoking history of ≥20 pack-year were enrolled in this study.

These volunteers were not diagnosed before as COPD patients and they also did not seek for prior repeated medical advice. All the participants were subjected to the following interventions:

Full medical and smoking history.

Through clinical examination.

Plain CXR,PA view.

Simple-spirometry: (FVC,FEV1,FEV1/FVC,FEF25-75) before and after bronchodilators. .

Finally the results will be tabulated and analysed to achieve the aim of the work.

References:

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