

الملخص الانجليزي للأبحاث المقدمة من الدكتورة / منى ابراهيم احمد
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وذلك لتقديمها الى اللجنة العلمية الدائمة لأمراض الصدر توطئة للترقى لدرجة استاذ مساعد بالقسم

Paper 8:

Predictors of progression of renal functions in Patients with Chronic Obstructive Pulmonary Disease (COPD)

Abstract:

Introduction: Chronic obstructive pulmonary disease (COPD), is a prevalent, treatable, and preventable illness marked by persistent respiratory symptoms and restricted airflow because of abnormalities in the airways and alveoli that are typically brought on by prolonged exposure to harmful particles or gases. In addition to producing a wide range of cytokines, pulmonary cells can target other organs, enter the systemic circulation, and cause inflammation. Angiotensin-converting enzyme (ACE) expression and pulmonary vascular permeability can both be impacted by renal ischemia. This can impair the function of ion channels, which are in charge of the re-absorption of fluids at the level of the pulmonary alveoli.

Aim of the study: To estimate the impairment of renal function in individuals suffering from COPD.

Subjects and Methods: The study was conducted on one hundred patients with COPD between March 2022 and February 2023, either during their admission to the chest department of Fayoum University Hospital or during their follow-up in the outpatient clinic.

Results: There was a correlation between FEV1 and creatinine in COPD patients during the study ($p = 0.019, < 0.05$). There was neither a significant correlation with the COPD class nor with FEV1 ($p = 0.359, 0.477$). There was no significant statistical correlation between FEV1 or classes of COPD patients with regard to eGFR ($P = 0.095, 0.554, < 0.05$), respectively.

Conclusion: Compared to normal populations, COPD patients are more likely to develop chronic kidney disease (CKD), which can be evaluated using a variety of techniques, such as laboratory measurement of blood creatinine, uric acid, albumin, and eGFR.

Keywords: COPD; Renal; Creatinine; Uric acid; CKD.