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Research article

Prevalence of hepatitis C and diabetes among chronic kidney diseases patients and their effects on renal functions

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Abstract

Background: The prevalence of hepatitis C virus infection in developed countries is higher in patients undergoing dialysis and in patients with chronic kidney disease (CKD) than the general population. The hepatitis C virus mainly causes liver damage, but is also associated with extra-hepatic diseases, including various types of glomerulonephritis. Diabetic nephropathy is one of the most common complications of diabetes. The prevalence of diabetic nephropathy is increasing steeply along with the diabetes epidemic. **Objective:** This study aimed to discover the effects of HCV infection and diabetes in the progression of CKD. **Methods:** This study was conducted on 72 patients with chronic renal failure and 40 healthy persons as control. The study was performed in El-Zahraa hospital, Libya. **Results:** Most of patients were in stage five of CKD. By serological test for HCV, we found that, 31.1% of male and 28.9% of female patients are infected with hepatitis C virus and 48.75% of males and 42.1% of females were diabetic. The diabetic patients who infected with HCV were 14.3% of males and 26.3% of females. The patients who free from both diabetes and HCV were 20% of males and 20.3% of females. The diabetic patients showed also increase in serum creatinine, which is higher than the increase in the groups free from HCV and diabetes but lower than the groups of HCV infection, also urea levels in both diabetic and hepatitis groups were higher than levels in non-diabetic and negative for HCV serological test.