

Assessment of Hepatosteatosi Among Diabetic and Nondiabetic Patients Using Biochemical Parameters and Noninvasive Imaging Techniques

Authors : Tugba Sevinc Gamsiz, Emine Koroglu, Ozcan Keskin

Abstract : Aim: Nonalcoholic fatty liver disease (NAFLD) is considered the most common chronic liver disease in the general population. The higher mortality and morbidity among NAFLD patients and lack of symptoms makes early detection and management important. In our study, we aimed to evaluate the relationship between noninvasive imaging and biochemical markers in diabetic and nondiabetic patients diagnosed with NAFLD. Materials and Methods: The study was conducted from (September 2017) to (December 2017) on adults admitted to Internal Medicine and Gastroenterology outpatient clinics with hepatic steatosis reported on ultrasound or transient elastography within the last six months that exclude patients with other liver diseases or alcohol abuse. The data were collected and analyzed retrospectively. Number cruncher statistical system (NCSS) 2007 program was used for statistical analysis. Results: 116 patients were included in this study. Diabetic patients compared to nondiabetics had significantly higher Controlled Attenuation Parameter (CAP), Liver Stiffness Measurement (LSM) and fibrosis values. Also, hypertension, hepatomegaly, high BMI, hypertriglyceridemia, hyperglycemia, high A1c, and hyperuricemia were found to be risk factors for NAFLD progression to fibrosis. Advanced fibrosis (F3, F4) was present in 18,6 % of all our patients; 35,8 % of diabetic and 5,7 % of nondiabetic patients diagnosed with hepatic steatosis. Conclusion: Transient elastography is now used in daily clinical practice as an accurate noninvasive tool during follow-up of patients with fatty liver. Early diagnosis of the stage of liver fibrosis improves the monitoring and management of patients, especially in those with metabolic syndrome criteria.

Keywords : diabetes, elastography, fatty liver, fibrosis, metabolic syndrome

Conference Title : ICIMH 2019 : International Conference on Internal Medicine and Healthcare

Conference Location : Athens, Greece

Conference Dates : April 08-09, 2019