

0136

FIBROSCAN IN ASSOCIATION WITH FIB-4, APRI, AND AST/ALT RATIO FOR ASSESSMENT OF LIVER FIBROSIS IN NON ALCOHOLIC FATTY LIVER DISEASE IN WOMEN WITH T2DM

Dr Dakshata Padhye, Dr Snehal Tanna, Ms Aleyamma James, Ms Nithya Nair, Ms Muskan Shah, Ms Reva Kovil

Conquer Diabetes Center, Diabetes, Mumbai, India

Abstract

Background and Aims

The routinely used modalities (laboratory tests and ultrasonography), for the diagnosis of NAFLD, are unable to adequately determine the levels of steatosis and fibrosis

Methods

We assessed liver fibrosis - transient elastography using FibroScan (n=42), with Fibrosis-4 (FIB-4) scores, AST platelet ratio index (APRI scores), and AST/ALT ratios in patients with T2DM with NAFLD. Stages of fibrosis were (F0 1 - 6, F1 6.1 - 7, F2 7 - 9, F3 9.1 - 10.3, and F4 \geq 10.4)

Results

Mean age and duration of diabetes were 62 (\pm 9.2, range 38-77) and 12 (\pm 6.8, range 0-25) years, respectively. Mean stiffness score, fibrosis score, APRI scores were 11 (\pm 7.2, range 3.5-34) kPa, 1.9 (\pm 1.4, range 0.48-7.5), 0.39 (\pm 0.31, range 0.15-1.4), respectively. Nineteen (45%) had advanced fibrosis (>F2). Mean platelet (232 ± 67 k/ μ L), serum ALT (27 ± 18 U/L), serum AST (30 ± 16 U/L), were normal. There was significant positive correlation between age and fibrosis score ($r = 0.32$, 95% CI 0.018 to 0.56, $p = 0.038$). Difference in stiffness score was significant in >F2 (16.94 ± 6.72) Vs F2 or less (5.97 ± 1.41); $p < 0.0001$. Duration of diabetes (years) was higher in >F2 (10.89 ± 5.81) Vs F2 or less 5.97 ± 1.41); $p = 0.003$. AST/ALT, APRI, and fibrosis scores were comparable, across the two groups.

Conclusions

FibroScan with other serum markers appears to be useful for the diagnosis of severe fibrosis and mitigates the need for liver biopsy. The high prevalence of diabetes with metabolic syndrome with a high proportion of advanced fibrosis is alarming.

Keywords: , FibroScan, T2DM, FIBROSCAN, T2DM

Abbreviations: NAFLD=Non Alcoholic Fatty Liver Disease

Funding and Conflicts of Interest

None