

Diagnostic performance of Fibroscan and CT in 322 normal ALT non-obese non-alcoholic fatty liver disease patients diagnosed by ultrasound

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Abstract

Objective : To compare the judgment of fatty liver by ultrasound, Fibroscan and CT in normal ALT non-obese patients, analyze the consistency and advantages among these noninvasive examination in NAFLD. Methods: 332 cases of non-obese NAFLD patients (BMI $\leq 25\text{ kg/m}^2$) with normal ALT were enrolled. All patients were diagnosed with fatty liver by abdominal ultrasonography. Meanwhile, Computed tomography and Fibroscan were used to evaluate the existence and severity of fatty liver. Results : 47.52 % and 67.70 % patients who diagnosed as NAFLD by ultrasound were unable to be diagnosed with fatty liver in accordance with the standard of controlled attenuation parameter (CAP) value by fibroscan and liver/spleen density ratio by CT. The evaluation of NAFLD by CAP standard were influenced by several factors, while only age and TG may affect the judgment of fatty liver when CT was used. Liver stiffness measurement (LSM) affects the diagnostic coincidence rate of Fibroscan, CT and ultrasound. Statistical difference could be found among different LSM groups in the severity of NAFLD evaluated by Fibroscan and CT. Conclusion: There is a discrepancy in the evaluation NAFLD by fibroscan, CT and ultrasound. LSM may affect the diagnostic coincidence rate of Fibroscan, CT and ultrasound.

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Table1.docx available at <https://authorea.com/users/285372/articles/409047-diagnostic-performance-of-fibroscan-and-ct-in-322-normal-alt-non-obese-non-alcoholic-fatty-liver-disease-patients-diagnosed-by-ultrasound>

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Table2.docx available at <https://authorea.com/users/285372/articles/409047-diagnostic-performance-of-fibroscan-and-ct-in-322-normal-alt-non-obese-non-alcoholic-fatty-liver-disease-patients-diagnosed-by-ultrasound>

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figuers--10-8.pdf available at <https://authorea.com/users/285372/articles/409047-diagnostic-performance-of-fibroscan-and-ct-in-322-normal-alt-non-obese-non-alcoholic-fatty-liver-disease-patients-diagnosed-by-ultrasound>

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Figure legend--10-8.pdf available at <https://authorea.com/users/285372/articles/409047-diagnostic-performance-of-fibroscan-and-ct-in-322-normal-alt-non-obese-non-alcoholic-fatty-liver-disease-patients-diagnosed-by-ultrasound>