

## INTISARI

**Latar Belakang:** *Fatty liver* adalah akumulasi lipid abnormal di hepar yang dapat berkembang dari steatosis sederhana hingga steatohepatitis dan meningkatkan risiko fibrosis, sirosis, kanker hepar, serta penyakit kardiovaskular. Meskipun biopsi hepar adalah metode standar diagnosis, namun karena sifatnya yang invasif, diperlukan metode non-invasif seperti *CT-scan* untuk penilaian kuantitatif *fatty liver* yang lebih aman dan andal. Penelitian ini bertujuan untuk mengetahui korelasi antara derajat *fatty liver* pada pemeriksaan *CT-scan* abdomen non kontras dengan kadar SGOT dan SGPT.

**Metode:** Penelitian analitik observasional yang melibatkan 35 orang pasien yang teridentifikasi mengalami *fatty liver* pada pemeriksaan ultrasonografi dan/atau *CT-scan* abdomen. Data penelitian diperoleh secara retrospektif berdasarkan data rekam medis. Derajat *fatty liver* berdasarkan pemeriksaan *CT-scan* dianalisis korelasinya dengan hasil pemeriksaan SGOT dan SGPT.

**Hasil:** Tidak terdapat perbedaan karakteristik usia, jenis kelamin, riwayat diabetes, riwayat hipertensi, riwayat merokok, kolesterol, indeks massa tubuh, SGOT, maupun SGPT antara pasien dengan *fatty liver grade* I, II, maupun III. Mayoritas pasien mengalami *fatty liver* yang termasuk dalam *grade* 3 (54,3%) berdasarkan perbandingan atenuasi parenkim hepar dengan vaskular intrahepatik. Mayoritas pasien mengalami *fatty liver* yang termasuk dalam *grade* 3 (54,3%) berdasarkan perbandingan atenuasi parenkim hepar dengan lien dan vaskular intrahepatik. Tidak terdapat korelasi antara kadar SGOT dan SGPT dengan derajat *fatty liver* ( $p = 0,390$  dan  $p = 0,513$ ), serta tidak terdapat korelasi antara kadar kolesterol dengan derajat *fatty liver* ( $p = 0,082$ ).

**Kesimpulan:** Tidak terdapat korelasi antara derajat *fatty liver* pada pemeriksaan *CT-scan* abdomen non kontras dengan kadar SGOT dan SGPT di RSUP Dr Sardjito

## ABSTRACT

**Background:** *Fatty liver* is an accumulation of abnormal lipids in the liver that can progress from simple steatosis to steatohepatitis and increases the risk of fibrosis, cirrhosis, liver cancer and cardiovascular disease. Although liver biopsy is the standard method of diagnosis, due to its invasive nature, non-invasive methods such as *CT-scan* are needed for safer and more reliable quantitative assessment of *fatty liver*. This study aims to determine the correlation between the degree of *fatty liver* on a non-contrast abdominal *CT-scan* and SGOT and SGPT levels.

**Methods:** Observational analytical study involving 35 patients who were identified as having *fatty liver* on ultrasound examination and/or *CT-scan* of the abdomen. Research data was obtained retrospectively based on medical record data. The degree of *fatty liver* based on the *CT-scan* examination was analyzed for correlation with the results of the SGOT and SGPT examinations.

**Results:** There were no differences in the characteristics of age, gender, history of diabetes, history of hypertension, history of smoking, cholesterol, body mass index, SGOT, or SGPT between patients with *grade* I, II, or III *fatty liver*. The majority of patients experienced *fatty liver* which was classified as *grade* 3 (54.3%) based on the comparison of hepatic parenchymal attenuation with intrahepatic vasculature. The majority of patients experienced *fatty liver* which was classified as *grade* 3 (54.3%) based on the comparison of hepatic parenchymal attenuation with splenic and intrahepatic vasculature. There was no correlation between SGOT and SGPT levels and the degree of *fatty liver* ( $p = 0.390$  and  $p = 0.513$ ), and there was no correlation between cholesterol levels and the degree of *fatty liver* ( $p = 0.082$ ).

**Conclusion:** There is no correlation between the degree of *fatty liver* on a non-contrast abdominal *CT-scan* and SGOT and SGPT levels at Dr Sardjito Hospital.