



Evolution of noninvasive tests of liver fibrosis is associated with prognosis in patients with chronic hepatitis C

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Résumé en
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UNLABELLED: No data are available about the prediction of long-term survival using repeated noninvasive tests of liver fibrosis in chronic hepatitis C (CHC). We aimed to assess the prognostic value of 3-year liver stiffness measurement (LSM), aspartate aminotransferase to platelet ratio index (APRI), and fibrosis 4 (FIB-4) evolution in CHC. CHC patients with two LSM (1,000-1,500 days interval) were prospectively included. Blood fibrosis tests APRI and FIB-4 were calculated the day of baseline (bLSM) and follow-up (fLSM) LSM. Evolution of fibrosis tests was expressed as delta: (follow-up-baseline results)/duration. Date and cause of death were recorded during follow-up that started the day of fLSM. In all, 1,025 patients were included. Median follow-up after fLSM was 38.0 months (interquartile range [IQR]: 27.7-46.1) during which 35 patients died (14 liver-related death) and seven had liver transplantation. Prognostic accuracy (Harrell C-index) of multivariate models including baseline and delta results was not significantly different between LSM and FIB-4 ($P \geq 0.24$), whereas FIB-4 provided more accurate prognostic models than APRI ($P = 0.03$). By multivariate analysis including LSM variables, overall survival was independently predicted by bLSM, delta (dLSM), and sustained virological response (SVR). Prognosis was excellent in patients having bLSM <7 kPa, SVR, or no increase (<1 kPa/year) in 7-14 kPa bLSM. Prognosis was significantly impaired in patients with an increase (≥ 1 kPa/year) in 7-14 kPa bLSM, or decrease (≤ 0 kPa/year) in ≥ 14 kPa bLSM ($P = 0.949$ between these two groups). Patients with an increase (>0 kPa/year) in ≥ 14 kPa bLSM had the worst prognosis. Baseline and delta FIB-4 also identified patient subgroups with significantly different prognosis.

CONCLUSION: Three-year evolution of noninvasive tests of liver fibrosis has a strong prognostic value in CHC patients. These tests should be repeated to monitor patients and predict their outcome.

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