FIBROSCAN SCREENING OF DIABETIC PATIENTS WITH A BMI< 35 kg/m2 SUBMITTED TO LAPAROSCOPIC SELECTIVE INTRA-ABDOMINAL SYMPATHECTOMY ASSOCIATED WITH A DUODENUM ILEAL INTERPOSITION AND SLEEVE GASTRECTOMY

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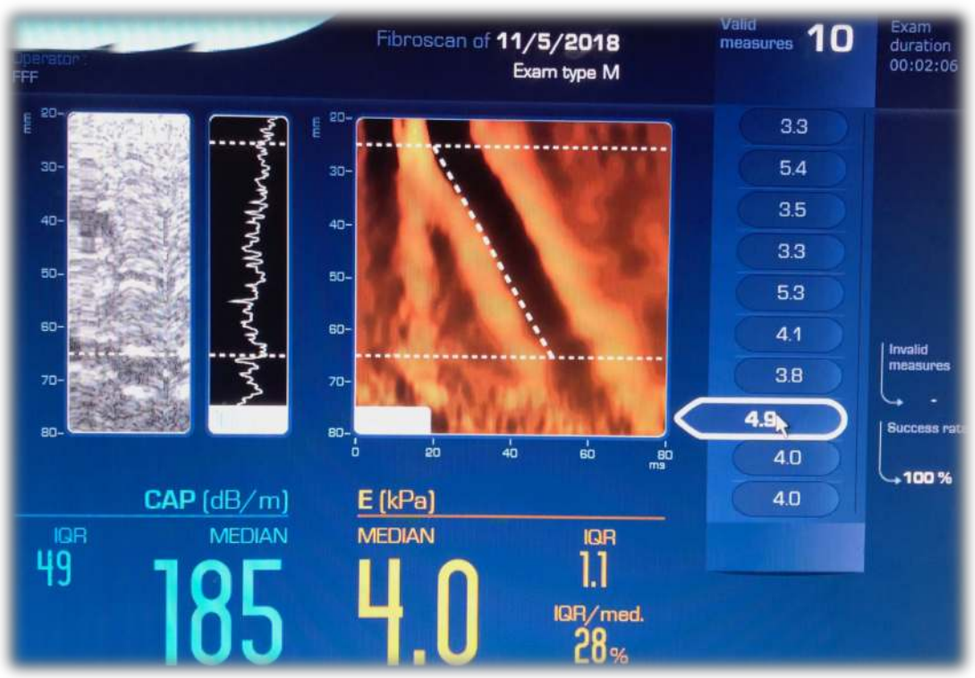
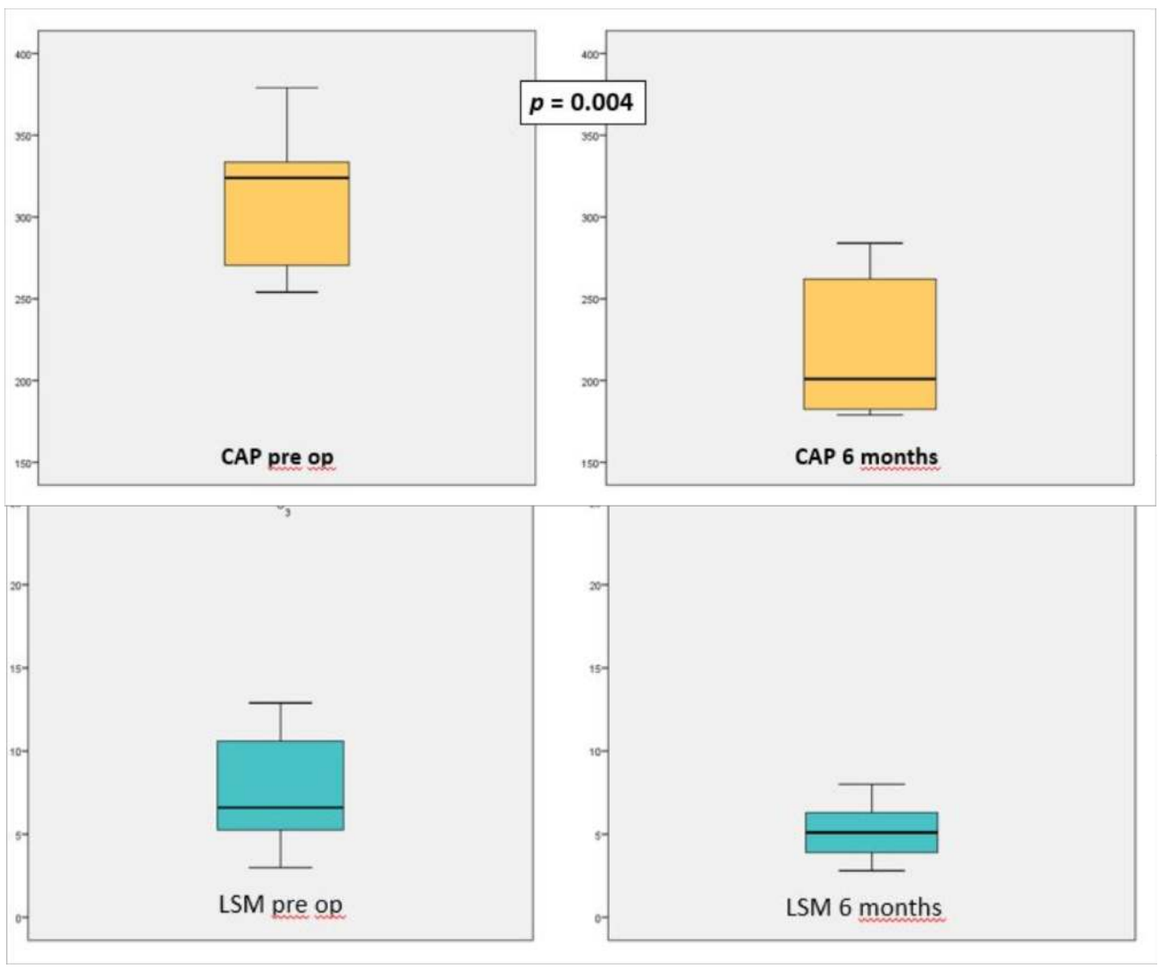
BACKGROUND: Type 2 diabetes (T2D) is a risk factor for non-alcoholic fatty liver disease (NAFLD), the most common cause of chronic liver disease, cirrhosis and hepatocellular carcinoma. Transient elastography (TE) is a well stablished non-invasive method for diagnosis of liver steatosis and fibrosis.

AIMS: To evaluate, with transient elastography (TE), the effect of laparoscopic selective intra-abdominal sympathectomy associated to a duodenal ileal interposition and sleeve gastrectomy for the treatment of TD2 on NAFLD.

METHODS: TE was performed with *Fibroscan®* on the right lobe of the liver through intercostal spaces, according to quality criteria determined by the manufacturer. Measurements were performed with M and XL probes. Baseline anthropometric data, laboratory parameters, liver stiffness measurement (LSM) and Controlled Attenuation Parameter (CAP) were collected from enrolled patients in clinical trial **NCT03333642**. LSM and CAP values were obtained at baseline and six months after surgery.



RESULTS: Of the 11 patients enrolled, seven were female and four were male. Mean BMI was 30 kg/m2 (26.6-34.5) and mean duration of T2D was 10.6 years (3-23). Mean glycated haemoglobin (HbA1c) was 10% (7.5-14.6) and 8 (72%) patients were on insulin. TE measurements were available in all patients. The median LSM and CAP were 8.6 (3-24.8) kPa and 292.2 dB/m, respectively. TE revealed no fibrosis (F0) in 8(72%) patients, moderate fibrosis (F2) in 1(9%) and advanced fibrosis (F4) in 2(18%). CAP revealed mild steatosis in 4(36%) patients, moderate steatosis in 2(18%) and severe steatosis in 5(46%).At the 6-month follow-up there was an improvement in hepatic steatosis and liver fibrosis, according to CAP and LSM.



CONCLUSION: Laparoscopic selective intra-abdominal sympathectomy associated to a duodenal ileal interposition and sleeve gastrectomy may improve liver stiffness and steatosis in TD2 patients with concomitant NAFLD.

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