

CLINICAL CASE

May 4th 2011

- 50 year old male, sedentary
- Progressive increase in weight of about 40 Kg in the last thirty years.
- 4 year history of T2D on treatment with metformin (1g TID) + glimepiride (2 mg QD)
- In addition: statin, sartan (Chol. and BP well-controlled).
- BMI 32.5, waist 122 cm, HbA1c 7.8 %
- OSAS: AHI 18

Prescribed:

- LS + CBT
- Liraglutide 1.8
- Glimepiride withdrawn

After 4 months:

- He lost 8 kg; HbA1c 6.4%
- A liver US showed severe steatosis (No alcohol, no hepatitis B or C).
- FIB-4: 2.02 (nv <1.45 - pathologic > 3.25)
*FIB-4 score <1.45 have a negative predictive value of 90% for advanced fibrosis.
In contrast, a FIB-4 >3.25 have a 97% specificity and a positive predictive value of 65% for advanced fibrosis.*

In the following 4 yrs he continued to be treated with Lira 1.8 + Met 2 g daily. He regained 4 kg and the HbA1c rose to 7%; overall he felt ok.

Liver US: severe steatosis.

In 2016 Fibroscan was performed:
5.4 kPa (nv <4.5 - pathologic > 5.7)
No liver biopsy was performed.

Fibroscan results may be over-estimated in case of:

- Liver inflammation.
- Benign or cancerous tumors.
- Liver congestion (HF).

FibroScan results may also be less accurate if you have:

- BMI >30
- Ascites
- Biliary obstruction

Transient Elastography (FibroScan)

Liver fibrosis staging	Metavir score	kPa
Normal	F0	2.0 – 4.5
Normal – Mild	F0 – F1	4.5 – 5.7
Mild – Moderate	F2 – F3	5.7 – 12.0
Moderate – Severe	F3 – F4	12.0 – 21.0+

Next, Lira was increased to 3 mg daily and in the following months he was able to loose additional 6 kg (overall – 10 kg from the beginning); waist was 110 cm.

From 2017 to mid 2019 he was lost to FU.

He came back in autumn 2019:

- He had a motorbike accident in Dec 2018;
- An abdomen CT with CM showed: “two (5 and 2 cm) hepatic hypodensities with ring enhancement on the arterial phase”.
- Serum alpha-fetoprotein level was high (>400 ng/ml);
- Child-Pugh A liver function.
- histopathological study confirmed the presence of primary hepatocellular carcinoma.
- He underwent surgical resections.

- After 6 months he had an hepatic recurrence (2 cm) and was treated with sorafenib (800 mg daily).
- In June 2020 pulmonary metastasis were detected.
- In January 2021 the patient eventually died.