

HIGHER HOMA LEVELS AND FAILED DECREASE IN BODY FAT CAN BE CONSIDERED UNFAVOURABLE PREDICTORS OF RESTORING EUGLYCAEMIA IN DIABETIC CIRRHOTIC PATIENTS UNDERGOING LIVER TRANSPLANTATION

Grancini V¹, Lunati ME¹, Spada A¹, Orsi E¹ .

1. Department of Medical Sciences, University of Milan, Endocrinology and Diabetology Unit, IRCCS Ca' Granda Foundation, Milan, Italy

BACKGROUND

Data from literature:

• BEFORE LIVER TRANSPLANTATION:

20-60%: altered glucose homeostasis



Increased insulin resistance

DUE TO



• AFTER LIVER TRANSPLANTATION:

- 67% : recover from DM
- 33% : remain diabetic



Increased insulin resistance
Decreased β -cell function

AIM OF THE STUDY

Highlight any factors that predict increased risk of persistence of post-OLT glucose homeostasis alterations in diabetic cirrhotic patients undergoing liver transplantation

MATERIALS AND METHODS

42 patients with liver cirrhosis (31M/11F):

- age 53 \pm 9,9 years
- waiting for OLT
- negative history for DM
- FPG and HbA1c in the normal range

Evaluation:

- Oral glucose tolerance test (OGTT) performed to diagnose DM
- Bioelectrical Impedance Analysis (B.I.A.) performed to quantify fat mass
- HOMA IR calculated to assess Insulin Resistance

OLT

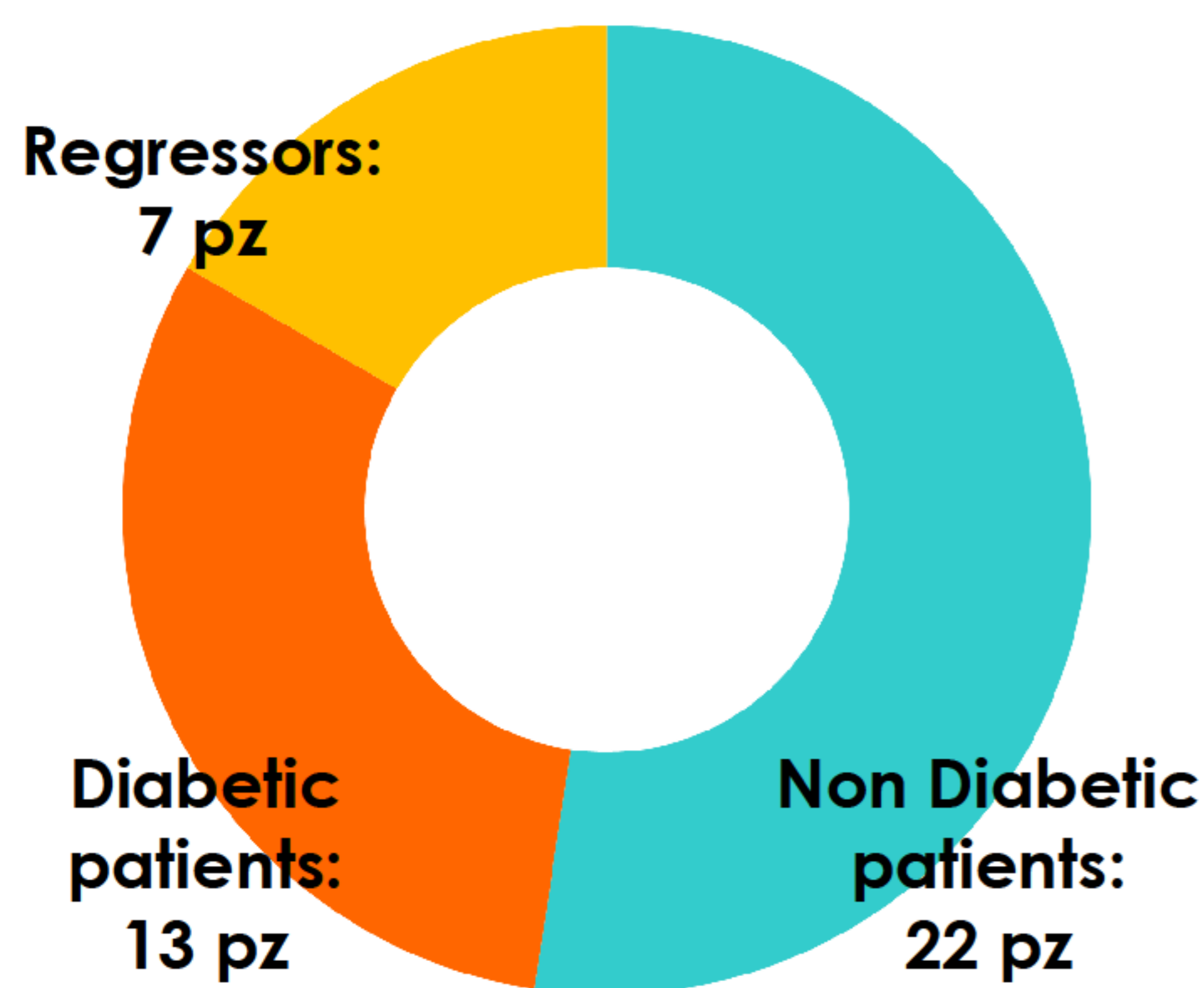


Assessed 6 months after OLT

- Non Diabetic (ND)
- Diabetic (D)
- Regressors (R)

RESULTS

Glucose Homeostasis:



| HOMA | | | | |
|---------------|---------------|---------------|--|------------|
| ND | D | R | | |
| $7,7 \pm 1,7$ | $3,1 \pm 0,6$ | $3,7 \pm 1,8$ | | $P < 0,05$ |

| BODY FAT DECREASE (%) | | | | |
|-----------------------|---------------|---------------|--|------------|
| ND | D | R | | |
| $-1,2 \pm 0,8$ | $1,5 \pm 0,2$ | $-13,3 \pm 9$ | | $P < 0,05$ |

CONCLUSIONS

In diabetic cirrhotic patients, higher HOMA levels and failed decreased in body fat after transplantation can be considered unfavourable predictors of recovering from diabetes after transplantation.

