

Lifestyle changes in DAA-cured Hepatitis C patients with advanced liver disease included in a nurse-led liver cancer screening program

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INTRODUCTION

The eradication of hepatitis C virus (HCV) does not abolish the risk of liver cancer (LC) development in patients with advanced liver disease. Several factors are associated with LC development after achieving sustained virological response (SVR).

AIM

Our aim is to describe the lifestyle-habits' changes and adherence in patients with SVR after HCV-treatment with direct acting antiviral (DAA), involved in a nurse-led LC screening program.

METHOD

HCV-related patients with advanced liver disease (F3 and cirrhosis) and cured after DAA during the period from 1st November 2015 to 1st December 2016 were enrolled at SVR in a LC screening program led by specialized nurses. Lifestyle habits questionnaires', liver ultrasound (US), laboratory and anthropometric measurements were made at baseline (SVR) and every 6 months until cancer diagnosis, death, or loss to follow-up. Here we present the first analysis comparing data at baseline and 4th year of follow-up.

CONCLUSIONS

The lifestyle-habits changes' in SVR patients after DAA such as a significant increase in alcohol consumption and an increase in waist-hip ratio and BMI are well-known risk factors for liver disease progression. Additionally, a very high adherence to a nurse-led liver cancer screening program could be a useful strategy to modulate lifestyle and reduce risk factors in these patients at risk of LC development.

RESULTS

We analyzed 182 patients whose characteristics are detailed in Table 1. During the 54.7 [49.9-58.2] months of median follow-up, 9 patients developed HCC (all were cirrhotic). Median time to HCC development was 30.7 [24.5-35.9] months. A total of 17 patients out of the 21 developed cancer (7 out of 9 HCC and 10 out of 12 other cancers) had a baseline BMI > 25.

A significant increase in body mass index (BMI) [0.2 (CI95%: 0.02-0.38)] at 6 months was observed and this change was maintained through all the time-points. At 48 months follow-up there was a 5,6% increase in median waist-to-hip ratio [0.94cm [0.88-1]] compared to baseline [0.89cm [0.82-0.97]] (Figure 1 and 2).

There were no changes in coffee consumption but a trend for increased physical activity was registered at 2 and 3 years of follow-up (p=0.08 and 0.09, respectively). A significant increase in alcohol consumption in the same time intervals (p=0.007 and p=0.02; respectively) was observed, while the number of patients who didn't answer the alcohol related questions increased from 2.7% to 10.3% at 3 years of follow-up (Figure 3).

The adherence to the LC screening program at 6 months, and 1, 2, 3 and 4 years were 98%, 97%, 92%, 90% and 80%, respectively

Table 1. Baseline characteristics of patients included in the screening program.

Patients, n	182
Age (ears), median [IQR]	69 [60 - 77]
Gender (Male), n (%)	94 (51.6)
Child-Pugh (A/B) *, n (%)	111 (92.5) / 9 (7.5)
Fibrosis degree, n (%)	
F3	62 (34.1)
F4	120 (65.9)
Body mass index (kg/m ²), median [IQR]	27.1 [24.9 - 29.6]
Males	27.5 [25.1 - 29.4]
Females	26.4 [24.9 - 29.8]
Waist-hip ratio (cm), median [IQR]	0.89 [0.82 - 0.97]
Males	0.94 [0.89 - 1]
Females	0.84 [0.79 - 0.88]
Smoking habit, n (%)	
Non smoker	76 (41.8)
Ex-smoker	68 (37.4)
Active smoker	35 (19.2)
No answer	3 (1.6)
Alcohol consumption, n (%)	
Never	121 (66.5)
Few times a month	40 (22)
Few times a week	16 (8.8)
No answer	5 (2.7)
Coffee intake, n (%)	
Yes	88 (48.4)
No	94 (51.6)
Physical activity, n (%)	
Yes	107 (58.8)
No	72 (58.8)
No answer	3 (1.6)
Frequency of physical activity per week, n (%)	
1 weekly	4 (3.7)
2 weekly	29 (27.1)
3 or more per week	70 (65.42)
No answer	4 (3.7)

* Based on patients who have fibrosis grade 4 (n= 120); IQR: interquartile range.

Figure 1 and 2. BMI and waist-to-hip ratio changes in patients at baseline and during the 48 months of follow-up.

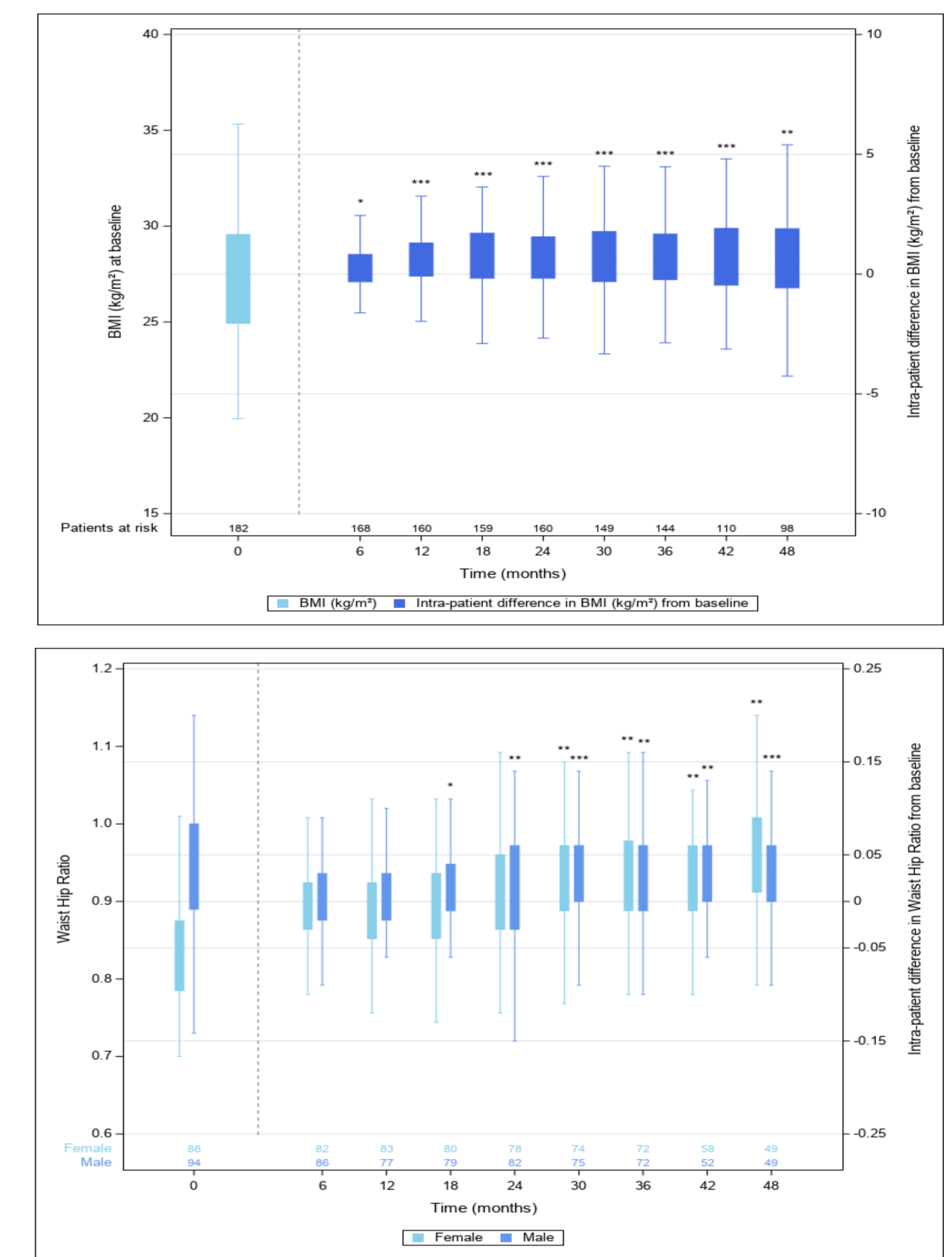
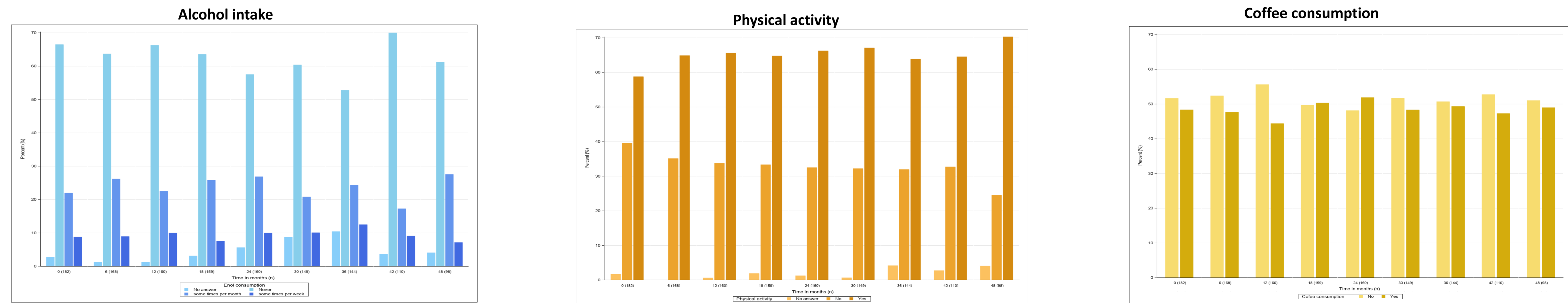


Figure 3. Lifestyle-habits changes' in patients at baseline and during 48 months of follow-up.



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