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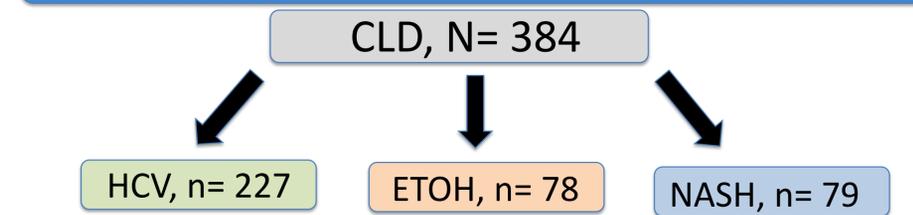
Background

- Weight gain after liver transplantation (LT) is common, particularly in patients transplanted for NASH cirrhosis, and is associated with reduced survival.^[1]
- While immunosuppressant use is often implicated as a key driver of post-LT weight gain, published literature has failed to support this assertion.^[2]
- In non-LT patients, presence and sub-optimal management of depression is closely associated with weight gain and obesity.^[3] The impact of depression as predictor of post-LT weight gain is currently not known.
- The aim of the present study was to bridge this gap in knowledge by evaluating the relationship between depression, liver disease and weight change after LT.

Methods

- All adult patients receiving LT between 7/2007 to 7/2017 were included in the analysis (N= 384). Patients with graft failure or death within 6 months after LT were excluded.
- Baseline weight was weight 2 weeks after LT to avoid contribution of peri-transplant edema.
- All patients meeting criteria were followed every 6 months in clinic where vital sign, weight, demographics, laboratory, medical history, anti-depressant use, and psychosocial history was collected.
- Screening for depression was performed by a psychologist or psychiatrist using DSM-IV/V guidelines.

Results



	HCV	ETOH	NASH
Age, year	57.4±5.7	54.6±8.6	58.8±7.6
Gender			
Male, n (%)	186 (81.9)	60 (76.9)	54 (68.4)
Female	41 (18.1)	18 (23.1)	25 (31.6)
BMI, kg/m ²	26.0±5	24.1±4.8	27.9±5.1
Diabetes, n (%)	66 (29.1)	19 (24.4)	47 (59.5)
Hypertension, n (%)	106 (46.7)	43 (55.1)	55 (69.5)
Dyslipidemia, n (%)	24 (11.4)	15 (19.7)	35 (46.1)
Depression, n (%)	60 (30.2)	18 (26.1)	27 (35.5)

Figure 1:
NASH, HCV, and ETOH with Depression vs No Depression

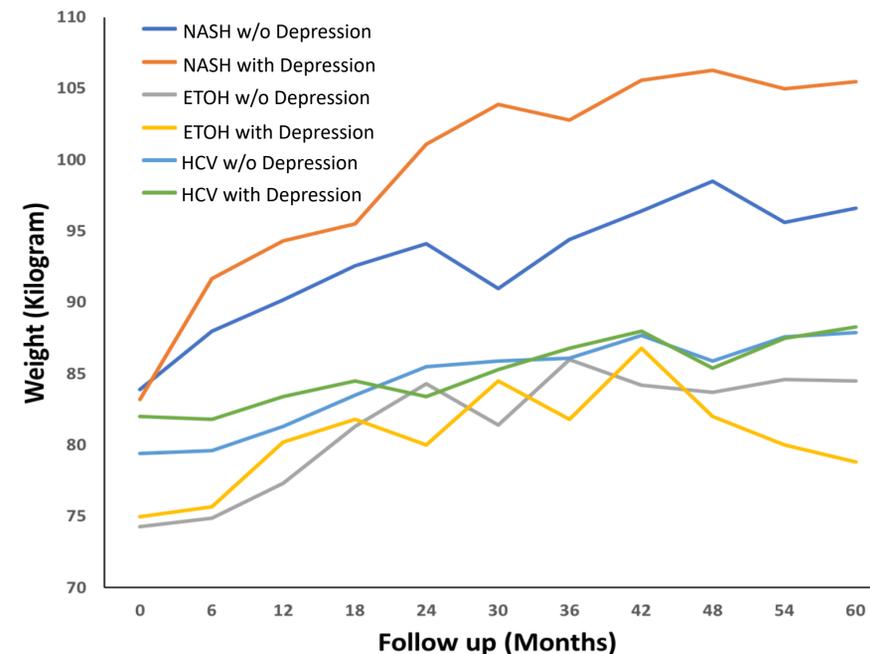
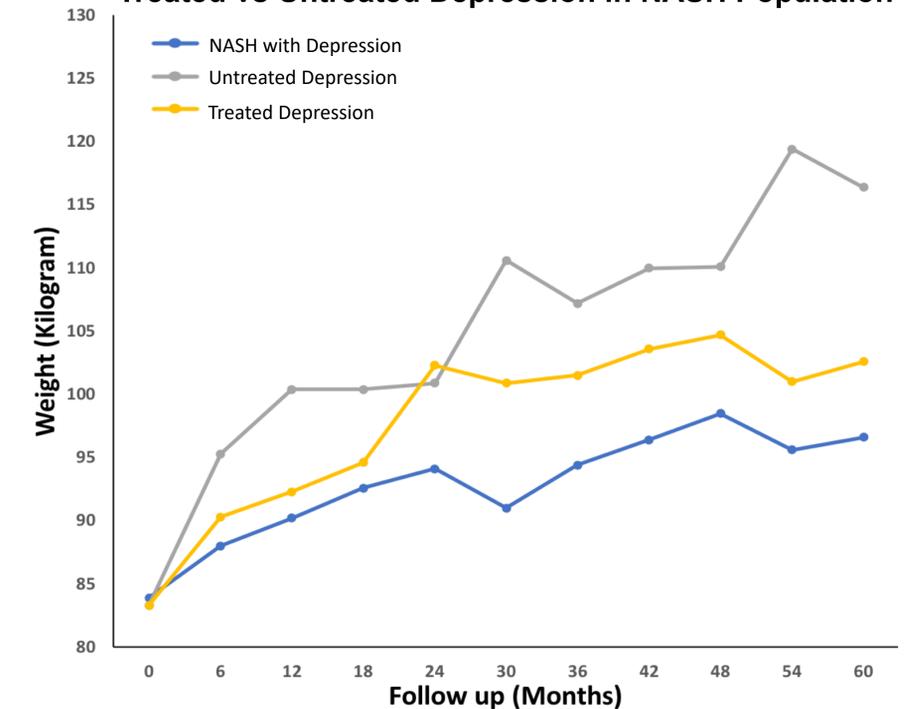


Figure 2:
Treated vs Untreated Depression in NASH Population



Conclusion

- Presence and under-treatment of depression are associated with more profound weight gain in patients transplanted for NASH cirrhosis, likely reflecting poor coping mechanisms.
- Additional trials with aggressive screening and treatment of depression in patients transplanted for NASH cirrhosis are essential to mitigate post-LT weight gain

Reference

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