



# Chronic Hepatitis C Treatment Response with Direct Acting Antivirals in Patients with Active Substance Abuse - A Community Hospital Study.

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## ➤ BACKGROUND

- Substance abusers and recovering addicts with Chronic Hepatitis C infection may face barriers to antiviral therapy.
- Limited data exist on evaluating the treatment outcomes with direct-acting antivirals (DAA) in patients with substance abuse or in recovery.
- We aim to assess the treatment response of DAAs in this subset of patients in community care setting.

## ➤ METHODS

- A retrospective cohort study was done on all Hepatitis C patients treated in our clinic with DAA between January 2016 & December 2017
- Baseline patient characteristics, treatment efficacy with the sustained virologic response at 12 weeks post-treatment (SVR12) were assessed in patients with substance abuse or on Opioid Agonist Therapy (OAT) and a control group of non drug abusers.
- All substance abusers had positive urine toxicology during the treatment period.

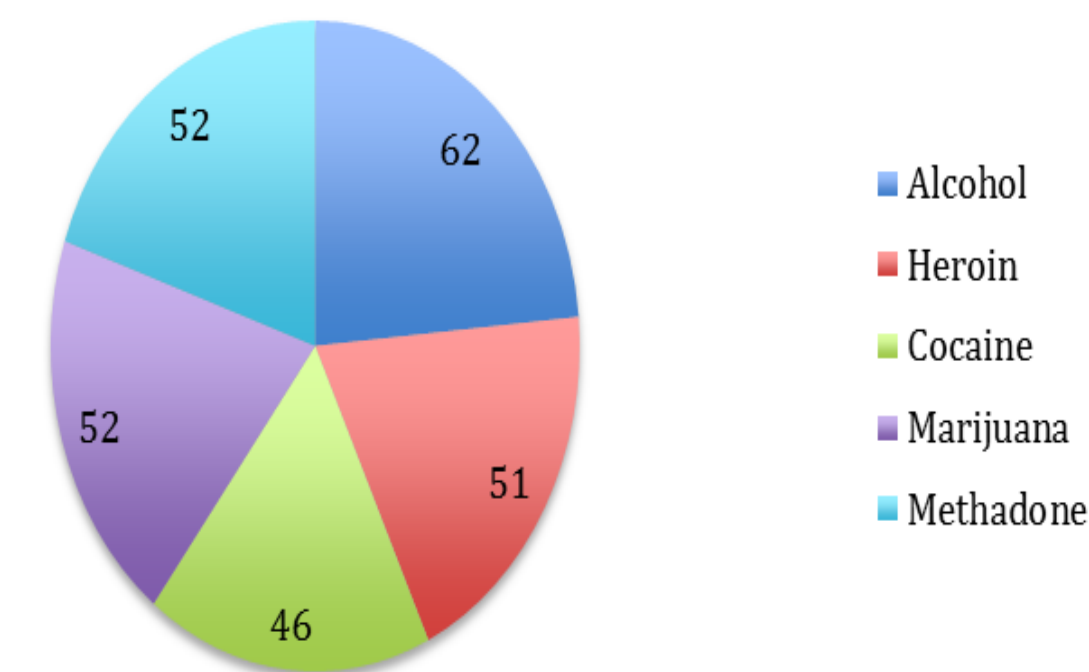
## ➤ RESULTS

- A total of 291 patients were evaluated of which, 181(62%) were substance abusers (including 56 patients on opioid agonist therapy) and 110(38%) non abusers
- Overall SVR12 was 94.8%. In Substance abusers - 95% and non abusers 94.5 %. SVR12 in the OAT group was 98%.
- SVR12 did not vary with demographics, baseline viral load, Genotype, HCV& HIV co-infection or prior treatment status.
- No one discontinued treatment to side effects.

## ➤ RESULTS

Demographics	All Patients (n=291)	Abuser (n=181)	Non-Abuser (n=110)	p-value
Age (years)	60.4 ± 10.4	60.9 ± 9.8	59.5 ± 11.3	0.295
<b>Sex</b>				
Male (%)	179 (61.5%)	114 (63.0%)	65 (59.1%)	0.610
Female (%)	112 (38.5%)	68 (37.6%)	44 (40%)	
BMI (Kg/m <sup>2</sup> )	28.2 ± 5.6	28.2 ± 5.7	28.3 ± 5.6	0.857
<b>HCV Genotype</b>				
GT 1a	172 (59.1%)	119 (65.7%)	53 (48.2%)	<0.001*
GT 1b	74 (25.4%)	49 (27.1%)	25 (22.7%)	
2	13 (4.5%)	8 (4.4%)	5 (4.5%)	
3	11 (3.8%)	5 (2.8%)	6 (5.5%)	
4	21 (7.2%)	1 (0.6%)	20 (18.9%)	
<b>HCV RNA (IU/mL)</b>				
< 800,000	88 (30.2%)	60 (33.1%)	28 (25.5%)	0.191
≥ 800,000	203 (69.8%)	122 (67.4%)	81 (73.6%)	
<b>Prior treatment</b>				
Naïve	231 (79.4%)	144 (79.6%)	87 (79.1%)	0.887
Treated	60 (20.6%)	38 (20.1%)	22 (20.0%)	
<b>Psychiatric Co-morbidities</b>				
Depression	81 (27.8%)	63 (34.8%)	18 (16.4%)	<0.001*
Schizophrenia	41 (14.1%)	32 (17.7%)	9 (8.2%)	0.027*
Bipolar disorder	52 (17.9%)	37 (20.4%)	15 (13.6%)	0.157
Anxiety Disorder	47 (16.2%)	35 (19.3%)	12 (10.9%)	0.065
Schizoaffective disorder	51 (17.5%)	35 (19.3%)	16 (14.5%)	0.323
<b>HIV status</b>				
Positive	63 (21.6%)	52 (28.7%)	11 (10%)	<0.001*
Negative	228 (78.4%)	130 (71.8%)	98 (89.1%)	

## Drugs of Abuse



Absolute count of positive drug screen; n=181  
n=119 showed 1 drug; n=41 showed 2 drugs;  
n=17 showed 3 drugs; n=4 showed 4 drugs.

## ➤ CONCLUSION

- DAAs are safe, effective with high overall SVR12 in patients with active substance abuse.
- We also noted a high treatment response in OAT enrolled patients.
- These results suggest that drug abuse is not a barrier to DAA therapy for Hepatitis C