A MULTIDISCIPLINARY APPROACH TO TREAT HEPATITIS C INFECTION IN HEROIN ADDICTED PATIENTS

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INTRODUCTION

Hepatitis C (HCV) treatment in people who inject drugs (PWID) and are on opioid agonist therapy (OAT) supposes a challenge due to lower adherence to treatment, with lower rates of sustained virological response (SVR, defined as undetectable HCV viral load 12 weeks after end of antiviral treatment). For this reason, a multidisciplinary approach has been created in our area (PAM-ADIC-C) to improve screening, diagnosis, assessment and treatment in patients under OAT.

AIMS

To describe the PAM-ADIC-C protocol and to present the results on adherence and SVR in heroin addicted patients included in the treatment.

METHODS

Since 2019 a network of centers/professionals treating addicted patients in our catchment area has been developed. The program is based in: a) point-of-care testing and fast referral from the drug-addiction center; b) accompaniment to visits by social educators; c) reduction in the number of visits; d) pharmacy externalization and on-site treatment delivery; e) coordination and evaluation of program results (Figure 1).
We have obtained socio-demographical data, hepatitis C infection data, substance use, comorbidity. Hepatic fibrosis was evaluated with portable transient elastography. Adherence rate has been calculated in patients that completed the treatment.

RESULTS

A total of 119 patients have been referred from the centers of the catchment area, and a total of 95 have been assessed (80%) (Figure 2). Patients assessed were male (79%), mean age: 45+9 years; six had received previous treatment and 26% presented advanced liver fibrosis (F3-F4) (Figure 3). The 87% of subjects were in OAT (mainly methadone). The 54% presented a comorbid diagnosis (no substance use related) (Figure 4). A total of 83 patients completed the treatment, and 54 have completed 12 weeks after end-of-treatment; mean adherence of 97%. SVR has been achieved in 52/54 (Figures 5).

Figure 1. Multidisciplinary PAM-ADIC-C protocol. Pre-treament visits are done in the Drug Addiction Center. Basal and Follow-up visits are performed in the General Hospital.

Pre-Treatment (Addiction Center)

- Hepatitis C diagnosis infection in the center (Physician/Psychiatrist)
- Substance use assessment (Physician/Psychiatrist)
- Psychiatric comorbidity assessment (Psychiatrist)
- Medication adherence evaluation (Drug Addiction team)

Basal visit (Social Educator accompanies the patient)

- Blood Test (Nurse)
- Portable transient elastography (Liver Specialist)
- Drug Interactions evaluation (Pharmacist)

Antiviral treatment is indicated
Treatment is given to Social Educators to be administered in the Drug Addiction Center

Follow up visits: Social Educator accompanies the patient

- End of treatment visit (8 or 12 weeks)
- Follow up visit: to determine SVR (3 months SVR12)
- Reinfection control: (every 6 months)

Figure 2. Patients referred and visited. Green column are patients referred and blue column are patients visited at least once.

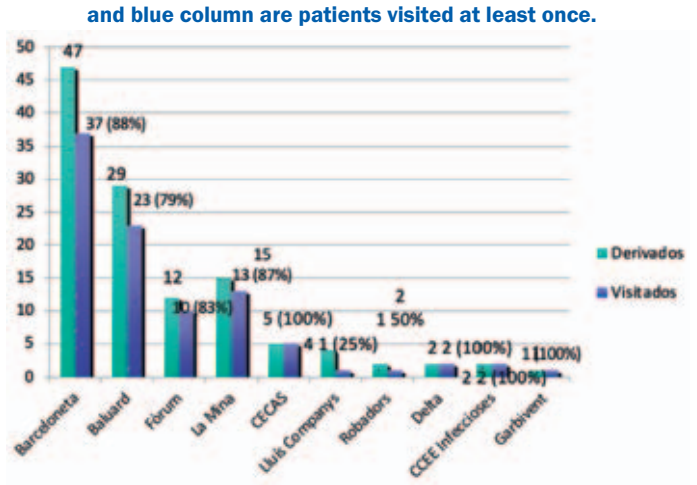

Figure 3. Basal characteristics of the 95 patients admitted to treatment.

	N= 95
Males	75 (79%)
Age	45 ± 9 (26-66)
Previous treatment	6 (6,3%)
Basal RNA (UI/ml)	3.494.615 ± 77.48.905 (61-64.029.000)
Genotype	
1a	37 (39%)
1b	8 (8,4%)
3a	24 (25,3%)
4a	11 (11,6%)
4d	5 (5,3%)
Basal Transient elastography	10,62 ± 12,53 (3,5 – 74,4)
Advanced fibrosis (F3-F4)	25 (26%)

Figure 4. HIV, other drug, and psychiatric comorbidity of the 95 patients admitted to treatment.

	N= 95
HIV	38 (40%)
Main Drug	
Heroin	90 (95%)
Cocain	2 (2%)
Alcohol	3 (3%)
Opioid Substitution Treatment	83 (87%)
Dual Diagnosis	51 (54%)
Affective disorders	12 (13%)
Psychosis	10 (11%)
Anxiety	4 (4%)
Personality Disorders	28 (30%)

Figure 5. Outcomes for the 95 patients admitted to treatment.

	N= 95
Treatment situation	
Treament completed (re-infection follow-up)	54 (57%)
Completed treatment (before SVR12)	29 (31%)
In treatment	5 (5%)
Basal RNA supressed	1 (1%)
Completing proves	1 (1%)
Treatment	
Glecaprevir/Pibrentasvir	45 (47%)
Sofosbuvir/velpastavir	49 (51%)
Ledipasvir/sofosbuvir	1 (1%)
SVR	52/54
Adherence to medication	97% (50-100)
Stoped treatment due to adverse events	0
People who not completed treatment	5 (5%)
Reinfections	1/54

CONCLUSION

A multidisciplinary approach and the co-location of care for HCV infection and addiction treatment in PWID is a strategy to achieve better access and more efficacy of HCV treatment in this population.

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