HIGH DAA-TREATMENT UPTAKE AND SUCCESS IN CLIENTS WITH CHRONIC HCV-INFECTION UNDER OST DESPITE STRUCTURAL AND INDIVIDUAL CHALLENGES

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Background

Worldwide, chronic hepatitis C virus infection (HCV) is most prevalent in patients who inject drugs (PWIDs). The Basel Center for Addiction Medicine offers opioid replacement therapy (OST) and HCV treatment to a difficult to treat population in an interdisciplinary setting. In Switzerland, treatment uptake for HCV with directly acting antivirals (DAAs), available since 2014, has been comparably low. There have been continuous restrictions by the Federal Office of Public Health (FSPO), limiting treatment to fibrosis grade, particular patients groups and provider-specialty. Negotiations with health insurances on an individual basis were often time consuming and frustrating to the prescribing physicians and their patients.
PWIDs have no strong lobby to defend their interests. Therefore, individual institutions fill in this gap. Our center has a clear concept towards HCV elimination.

Methods

All clients (n=350) at the center were tested for replicating HCV infection and actively approached for treatment. Recruitment for diagnostic work up was often difficult and only functioned via sanctions in OST distribution frequency. Concurrent alcohol consumption and compensated drug use parallel to OST were no contraindications for therapy. All concluded DAA-therapies between August 2014 and August 2017 were included for analysis. Fibrosis stage was diagnosed with fibroscan in the majority of patients (174 measurements) or by liver biopsy (57% included patients).

Results

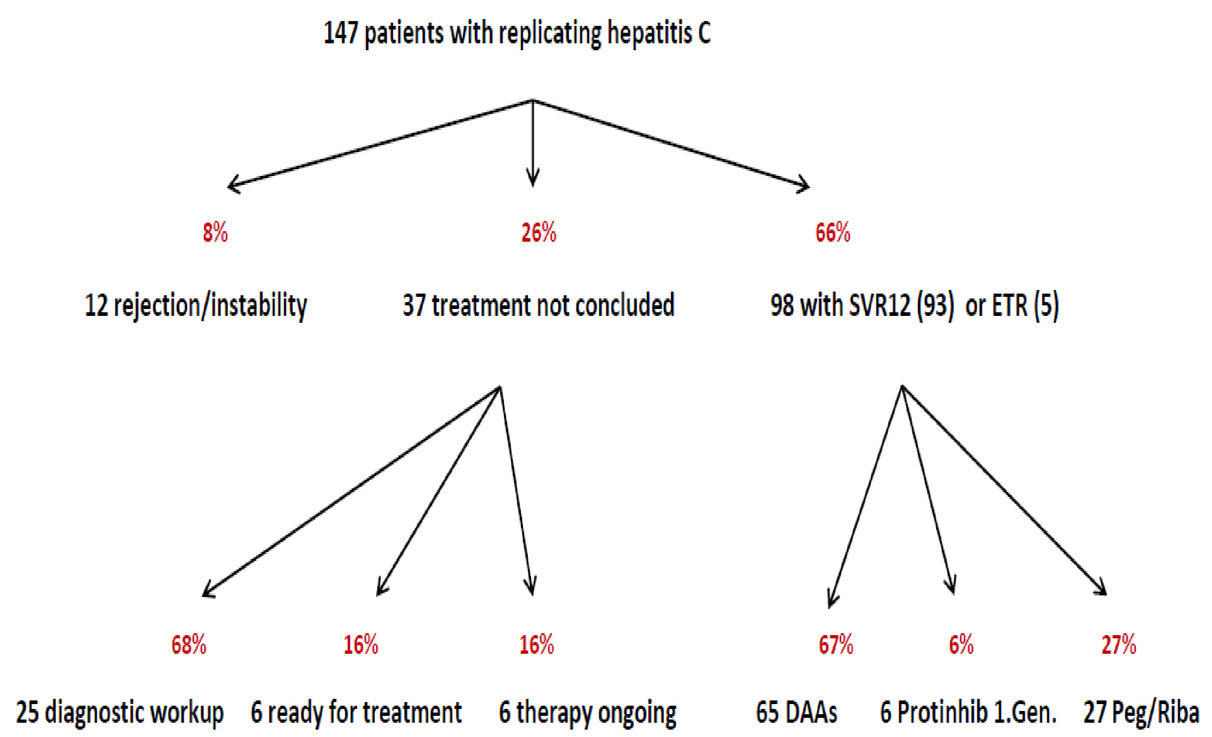
We identified 147 patients with active HCV (prevalence 42%). 2/3 of our clients have been successfully treated by August 2017 and about 2/3 of them received treatment with DAAs (flow chart 1). As depicted in table 1, psychiatric morbidity in our population is high. Only n=9 (14%) are without any psychiatric diagnosis or chronic alcoholism in addition to their opioid dependence. As consequence the majority of patients who are not treatable for HCV at present suffer from severe psychiatric disease and/or uncontrolled Heroine/Cocaine-consumption, including one patient with reinfection after cure with DAA. Genotype 1a is most prevalent, followed by genotype 3. In patients who underwent liver biopsy, 30% had fibrosis stage Metavir 4. Until present, there has been no treatment failure with DAAs. In 7 patients SVR12 has not yet been reached. One reinfection (2%) occurred after cure.

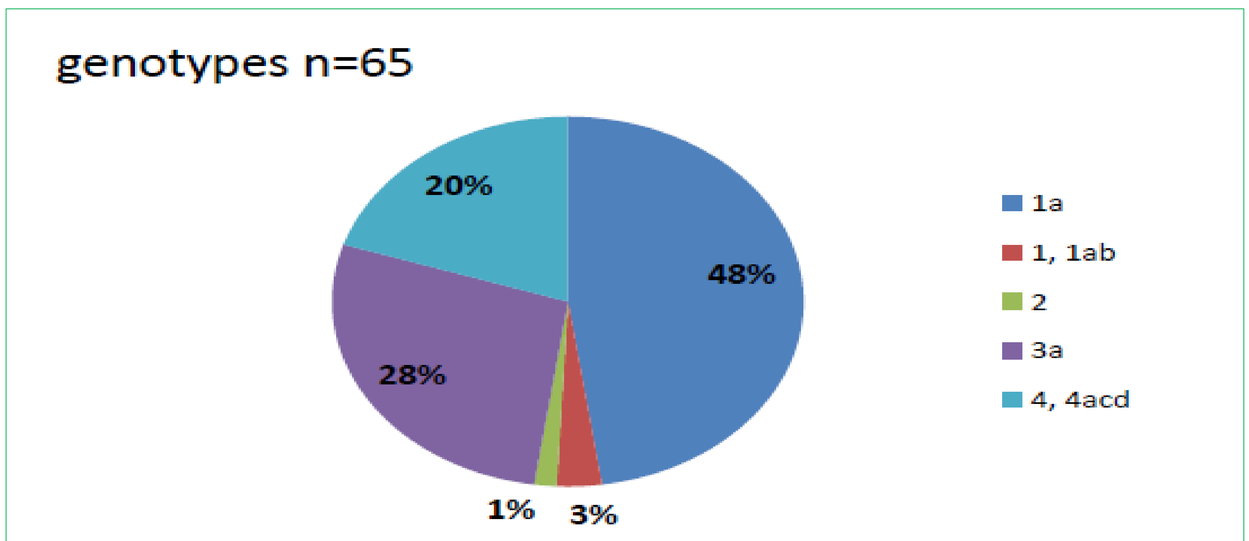
Table 1: Characteristics of 65 patients with concluded DAA-therapy

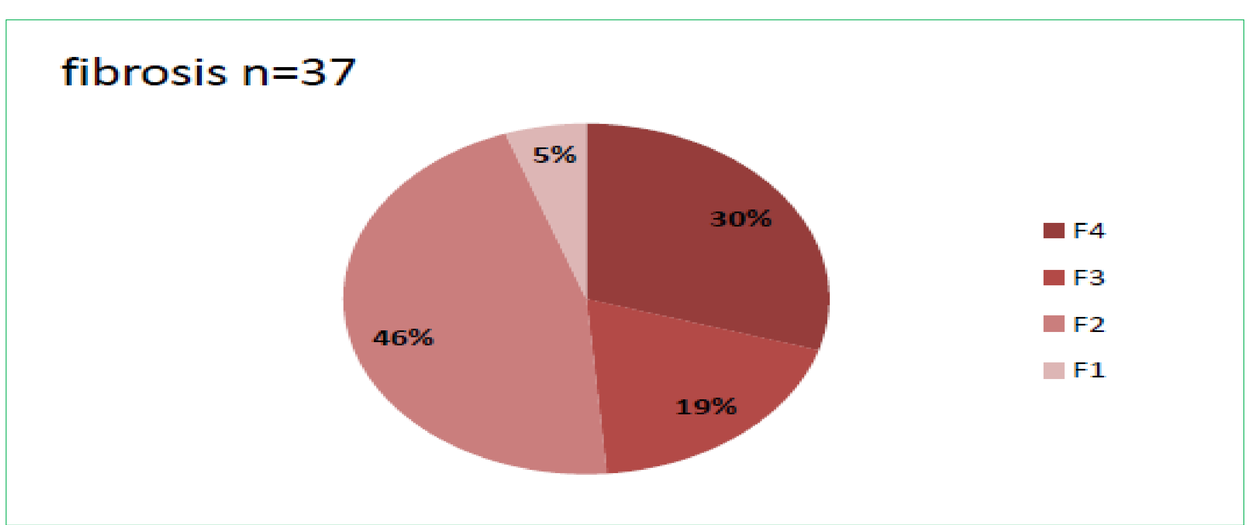
Age (years) mean (range)	49 (32-67)
Male n(%)	50 (77)
Opioid based substitution therapy n(%)	60 (92)
Ongoing heroine-and/or cocaine- consumption n(%)	39 (60)
Chronic alcoholism n(%)	16 (25)
Personality disorder n(%)	32 (49)
Affective disorder n(%)	31 (48)
ADHD n(%)	12 (18)
HIV coinfection n(%)	7 (11)
Patients with liver biopsy n(%)	37 (57)
Cirrhosis according to liver biopsy n(%)	11 (30)
Liver stiffness (kPa) mean (range) by fibroscan	14 (3-75)
Pretreated n(%)	24 (37)
Treatment duration 8 weeks n(%)	3 (5)
Treatment duration 12 weeks n(%)	42 (65)
Treatment duration ≥ 24weeks n(%)	20 (30)
Rapid virological response 4w n(%)	39/61 (64)[i]
End of treatment response n(%)	62/65 (95)
Sustained virological response 12w n(%)	58/58 (100)[ii]

[i]n=4 missing, [ii]n=7 with SVR 12 not yet available

Flow chart 1: Treatment cascade, August 2017







Discussion

We show a significant treatment increase since introduction of DAAs with 9 treatments in 2014, 18 treatment in 2015, 26 treatments in 2016 and 16 treatments in the first half of 2017 compared to 60 treatments in 14 years before. Compared to 50% treatment failures with Peg/Riba therapy and 33% treatment failures with 1st generation protease inhibitors there has been no treatment failure with DAAs until present. Reinfection was not significant (2%) in our population with a high frequency of persistent drug use.

Conclusion

Despite individual and structural barriers HCV-treatment with DAAs is highly successful in a real life setting as in our center with integrated psychiatric and somatic care. With the same treatment frequency we can predict to eliminate HCV in the population of our center by the end of 2018. Since 2013 we offer HCV-antibody saliva-testing and fibroscan measurements in safe injection facilities of the city of Basel. In 2018 we will enhance case finding by the introduction of capillary point-of-care HCV RNA-testing.

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