Successful treatment of Hepatitis C in a HIV co-infected underserved people who inject drugs (PWID) population in Glasgow, UK.

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BACKGROUND

There is an ongoing outbreak of HIV in Glasgow among people who inject drugs (PWIDs). Over 50% are co-infected with hepatitis C virus (HCV). Despite high risk of onward transmission there is a reluctance to treat PWIDs. We have developed a novel approach to engage with this traditionally hard to reach cohort including community pharmacy administration of HCV treatment linked with daily dispensing of opiate substitution therapy (OST) and/or HIV anti-retroviral therapies (ART).

METHODS

- Clinical review of current outbreak cohort.
- Identified HCV RNA positive individuals for assessment and treatment consideration.
- Active drug use was not a contraindication to HCV treatment.
- Out-reach clinic in the homeless addictions service provided all care, assessments and HCV treatment alongside HIV care.

RESULTS

Outbreak cohort, N=133 (figure 1)

•24 excluded (20 deceased and 4 transferred healthboard)
•72/109 male
•Mean age 40
•1/109 had previous HCV treatment
•103/109 (94%) on ART
•82/103 (75%) with viral suppression (VL <40)
•78/109 (72%) on ORT
– 74/78 (95%) on ART and 57/78 (73%) with viral suppression

Current patient status (figure 2)

•50/109 (46%) HCV RNA positive and not treated/planned for treatment.
•26/109 (24%) treated.
•33/109 (30%) HCV RNA negative and never treated (self-clearance).

Figure 1: Glasgow PWID HIV outbreak cohort, N=133

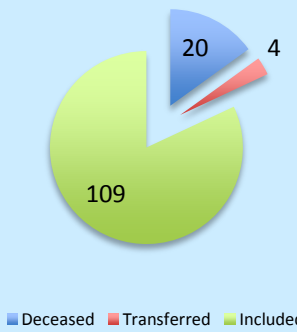


Figure 2: Cohort current patient status

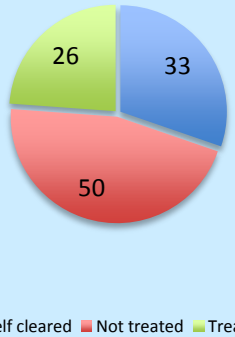
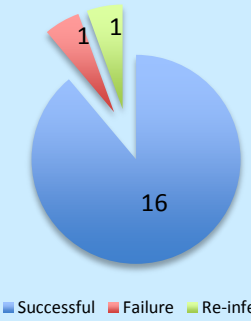


Figure 3: Treatment Outcomes N=18



Treatment Outcomes (Figure 3)

17/18 HCV RNA negative at end of treatment (EOT).

2/18 are now HCV RNA positive
•1 treatment failure (Patient A)
•1 re-infection (Patient B).

Patient A (Treatment failure)

- Genotype 1A
- 8 weeks Maviret
- Incarcerated, issues documented regarding taking ART due to lack of confidentiality. Moved to single cell and documented happy to now take ART and HCV treatment. No further concerns documented.
- EOT HCV RNA 34 (log 1.53)
- 3 months post treatment sample insufficient
- 5 months post treatment RNA detected (log 6.21)

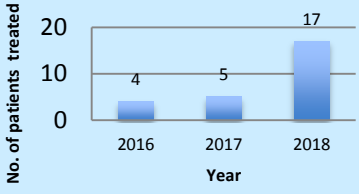
Patient B (Re-infection)

- Genotype 1A
- 12 weeks Zepatier commenced June 2017
- Received 8 consecutive weeks, missed 1 week, had further 2 weeks then missed the last 2 weeks.
- 8 week (on treatment) RNA undetectable (<12
- 2 month post treatment RNA undetectable (<12)
- 5 month post treatment HCV antigen positive and remained
- 10 month post treatment HCV RNA positive (log 3.39). Genotype unknown.

Treatment Numbers (Figure 4)

Exponential increase
4 in 2016
5 in 2017
17 in 2018 so far

Figure 4: HCV treatment



CONCLUSIONS

HCV treatment can be successfully delivered in underserved populations but the care model has to be support engagement. We have shown increasing numbers of patients receiving HCV treatment representing the growing PWID cohort in addition to the superior reach of the out-reach model. Treatment has a high success rate with low re-infection rates to date. This has important public health implications for prevention of onward transmission and reducing future liver disease and related morbidity and mortality.

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