

Burden of HIV/Hepatitis C co-infection in an inner-city sexual health clinic

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Background

- Despite major advances in the treatment of Hepatitis C (HCV) infection in recent years, it remains a major public health concern, with 160,000 living with chronic HCV in England.¹
- Sexual transmission in men who have sex with men (MSM), particularly in HIV co-infection, is increasingly reported, with an estimated prevalence of 9.9%.²
- HIV/HCV co-infection leads to: increased HCV viral loads, more rapid liver fibrosis rates and increased risk of hepatocellular carcinoma.³
- Our inner-city sexual health department has been providing a joint HIV/ Hepatology clinic to ensure appropriate management.
- Directly Acting Antivirals (DAAs) were available since 2013, however have been prioritised to those in greatest need.

Methods

- A retrospective case-note review was conducted on all new HIV/HCV co-infected patients attending from 2007-2018, pre and post DAA availability.
- Demographics, risk factors, initial treatment offered, reinfection rates and retreatments were recorded.

Results

- A total of 174 HIV/HCV co infected patients accessed our service from 2007- April 2018, of whom 97% were male.
- Acute HCV was diagnosed in 70% of total patients.
- Table 1 compares pre-and post- DAA cohorts.

Table 1: HCV Infections Pre & Post Departmental DAA Availability

	2007-2012	2013-2018
Number of patients	69	105
Male	67 (97%)	102 (97%)
Heterosexual	7 (10.1%)	9 (8.6%)
MSM	60 (87%)	96 (91.4%)
Female	2 (3%)	3 (3%)
Median age (range)	38 (14- 57)	37 (20- 61)
Risk factors		
Blood products	3 (4.3%)	2 (1.9%)
IDU (heterosexual)	6 (8.7%)	6 (5.7%)
IDU (MSM)	3 (4.3%)	50 (43%)
MSM	60 (87%)	45 (42.8%)
Unclear		2 (1.9%)
Acute Infection	42 (61%)	79 (75.2%)
GT1	36	66
GT2	1	
GT3	1	1
GT4	2	5
Unknown	2	7
Chronic Infection	27 (39%)	26 (24.8%)
GT1	15	13
GT2		1
GT3	5	
GT4	3	4
GT 5	1	
Unknown	3	8
Re-infection	3	11
GT1	3	8
GT4		1
Unknown		2
Spontaneous clearance	8	14
Failed treatment		
PegIFN, RBV	11	10
DAAs	0	0

Results (continued)

HCV Re-infections

- Of the sixteen reinfections, rates were highest amongst MSMs (8; 57%) and MSM reporting IDU (4; 28.6%).
- Reinfection rates were highest post DAA availability (11; 10.5%)
- Table 2 demonstrates the characteristics of individuals presenting with HCV re-infection

Table 2: Baseline Characteristic at Incident and Re-infection

	Incident infection (2007-2018)	Re-infection
Number included	174	16 (9.2%)
Genotypes (%)	GT 1: 130 (74.7%) GT2: 2 (1.1%) GT3: 7 (4%) GT4: 14 (8%) GT 5: 1 (0.6%) Unknown: 20 (11.49%)	GT 1: 13 GT 2: 0 GT3: 0 GT4: 0 Unknown/ Not Done: 3
Median age	38 (14-61)	41 (25 – 53)
Proportion that clear spontaneously	12 (12.6%)	2 (12.5%)
SVR proportion following retreatment		12 (75%) 3 DNA follow up appointment 1 Transferred to another department

Conclusions

- Our findings demonstrate increasing rates of HCV in MSM and those reporting IDU.
- As improved DAA availability occurred, fewer treatment discontinuations and increased SVRs have been witnessed.
- Despite these findings, we identify persistently high rates of HCV re-infection, thus highlighting the importance of continued education, needle exchange programmes, safer sex advice, regular testing and access to retreatment.

References

1. Public Health England, 2018. Hepatitis C in England, 2018 Report.
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3. British HIV Association guidelines for the management of hepatitis viruses in adults infected with HIV 2013. *HIV Medicine* (2013), 14 (Suppl. 4), 1– 71.