5th HEPATITIS C TECHNICAL ADVISORY GROUP

TAG Meeting

HCV REINFECTION AMONG HIV PATIENTS AFTER DAA THERAPY IN THE COUNTRY OF GEORGIA

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Background

HCV infection was a major public health challenge before availability of simple and effective DAA therapies

The short duration with minimal side effects make HCV cure a possible for those who have access to treatment

Background

The ability to cure hepatitis C has also fueled optimism regarding the potential for HCV elimination

But we must remember

HCV is not measles, mumps or rubella

Background

HCV infection does not confer protective immunity

Individuals who have cleared a previous infection remain at risk for reinfection

Background

The potential for HCV reinfection remains a major obstacle to achieving the HCV elimination goals

HIV-infected subgroup may be most at risk in terms of HCV reinfection

HCV Reinfection in HIV/HCV in EuroSIDA Cohort

		Interferon	DAA
Study population	585	475	110
Reinfected	78, 13.3% (10.6-16.0%)	63, 13.3% (10.2-16.3%)	15, 13.6% (7.2-20.0%)

Background

In 2015, through partnership with US CDC and Gilead Sciences, Georgia launched national hepatitis C elimination program

All HCV patients, including HIV co-infected persons, have free access to direct acting antivirals (DAA)

We report rates of HCV re-infection among HIV-infected persons in real-life settings

Methods

- Analysis included HIV patients treated with DAAs in the country during 2015-2017 and who achieved sustained virologic response (SVR)
- Definition of SVR:
  - Negative HCV RNA result after 12 weeks of DAA treatment completing

Methods

- Patients were followed until August 2019
- Risk-based approach was used to screen for HCV reinfection:
  - History of injection drugs use (IDU)
  - High risk sexual behavior
  - Recent history of invasive procedures
  - Elevated liver enzymes

Methods

- Definition of reinfection:
  - Being HCV RNA positive after confirmed SVR12

Results

During the study period 420 patients achieved SVR

274 (65%) were screened for HCV reinfection

Among 274 tested for reinfection the median age was 46 (IQR: 40-51) years

242 (88.3%) were men

201 (73.4%) had history of IDU

Results

HCV genotypes included:

103 (37.6%) genotype 1

84 (30.7%) genotype 3

83 (30.3%) genotype 2

4 (1.5%) genotype 4

142 (51.8%) were treated with ledipasvir/sofosbuvir ± ribavirin

58 (21.2%) – with sofosbuvir/ribavirin

74 (27.0%) – with sofosbuvir/ribavirin + pegilated interferon

Results

Patients were followed for median 1.8 (IQR: 1.1-2.5) years contributing to 507 person-years (PY) of follow-up

In total, 12 (4.4%) persons had HCV reinfection with an overall incidence of 2.4 per 100 PY

All reinfected patients were men with history of IDU.

One person was in prison

The median time to reinfection was 1.5 (IQR: 0.9-2.2) years

Results

Genotype switch was documented in 7 (58.3%) cases of reinfection

Rate of reinfection among persons with history of IDU was 3.3/100 PY

Among 201 persons with history of IDU only 32 (15.9%) were engaged in opioid substitution treatment (OST)

Reinfection rate among persons on OST was 1.5/100 PY (1 reinfection) vs. 3.7/100 PY (11 reinfections) among those not receiving OST

Results

- No statistically significant differences were observed in rates of reinfection by baseline HCV genotype and treatment regimen

Conclusion

The proportion of reinfection among HCV/HIV co-infected individuals within 24 month after achieving SVR was 4.4%

Females were found to have no risk behavior of reinfection

HIV positive IDUs are at high risk of re-infection following successful DAA therapy

Conclusions

The following things are essential for achieving elimination targets:

Awareness of patients about possible risk-factors of HCV reinfection

Active surveillance for early reinfection detection

Early offer of retreatment for those who defined as reinfected

Greater engagement in OST programs for preventing reinfection among PWID

- Thank you for attention