

HCV infection in an outpatient PrEP clinic in a Portuguese tertiary hospital

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Background

The use of **intravenous drugs** is the primary way of transmission of **Hepatitis C Virus (HCV)**. **Sexual transmission**, particularly in patients infected with human immunodeficiency virus (HIV), is also frequently reported. **HIV-negative men who have sex with men (MSM)**, especially those under **pre-exposure prophylaxis (PrEP)**, are a recognised at-risk population.

In this work, we determined the incidence of **acute HCV infection** and described the **risk factors** usually associated with its transmission in the setting of an **ambulatory PrEP clinic**.

Materials and methods

Retrospective analysis of the electronic registries of the patients seen in the PrEP clinic in a tertiary hospital between January 2019 and June 2022.

Results

436

Patients assessed in PrEP consultation

0.9% (n=4)

Diagnosed with an acute HCV infection

- Men who had sex with men
- Daily regimen of PrEP (TDF/FTC)
- Mean age of 30 years
- Mean average time between the beginning of PrEP and the diagnosis was 326 days (min. 28, max. 717)
- One patient was diagnosed before the introduction of PrEP

Reviewed every **three months** with HCV antibodies (HCV Ab) and alanine aminotransferase (ALT)

Characteristics at the time of diagnosis

All asymptomatic
Positive HCV antibodies
Genotype 1a

	Viral load IU/mL	ALT levels IU/L	Abdominal Ultrasound	FibroScan®
Patient 1	6399209	876	Normal	F1
Patient 2	1200	58	Normal	NA
Patient 3	23196	245	Normal	NA
Patient 4	462	124	Hepatic steatosis	F0

ALT↑

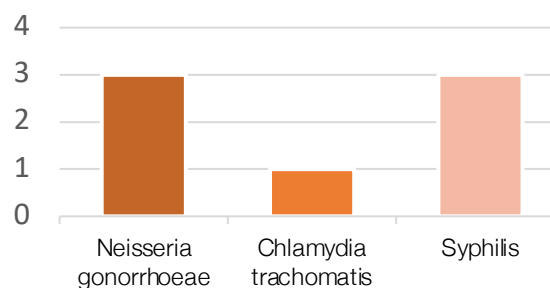
All at the time of diagnosis
2 in the previous evaluation (with negative HCV Ab)

NA – non available

Risk factors

- MSM without a stable partner
- 2 had **unprotected sex**
- None of the patients were **intravenous drug users**
- All with at least one other **sexually transmitted disease (STD)**
 - Neisseria gonorrhoeae – oral and anal
 - Syphilis – one secondary, two late latent

STD



Treatment

At the time of writing, two patients are **undergoing treatment** for HCV infection (with Glecaprevir/pibrentasvir), one has completed the treatment with a **sustained virological response** at 24 weeks post-therapy (with Sofosbuvir/velpatasvir).

The other one is waiting to start the treatment.

The number of **acute HCV** infections is increasing in HIV-negative patients, especially in **MSM under PrEP**. It is important to notice that risk factors are mainly associated with behavioral habits and the elevation of ALT can precede the seroconversion. This underlines the importance of **regular surveillance** to allow an early diagnosis and prompt treatment, particularly in this population with **risk factors** for the transmission.