

HEPATITIS C VIRUS PREVALENCE AND OUTCOMES AMONG PREGNANT WOMEN WHO INJECT DRUGS

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Introduction

Hepatitis C virus (HCV) infections in the United States have increased over the past decade. This is in part attributable to injection drug use associated with the opioid epidemic and is most prominent among persons 20–39 years old. The increase in this age group has led to a rise in the prevalence of HCV in pregnancy from 1.8 to 5.1 per 1000 live births. Approximately 60–75% of pregnant women with a history of opioid and injection drug use are HCV positive. The changes in screening guidelines should identify more of these women resulting in improved linkage to care and eventual treatment.

Methods

We retrospectively assessed the prevalence and outcomes of HCV among pregnant women who inject drugs at a hepatology clinic known as “La Bodega” between January 2017 and May 2022. “La Bodega” uses a colocalized approach to treat hepatitis C in individuals with opiate dependence, including active substance users. The yearly prevalence of HCV infection, HCV genotypes, treatment regimens, and outcomes for pregnant women at this clinic were obtained via chart review.

Results

- The number of HCV antibody positive pregnant women with injection drug use referred to the “La Bodega” hepatology clinic increased between January 2017 and May 2022 (Figure 1).
- Among these 27 women, 7 (25.9%) missed the initial appointment, 3 (11.1%) were lost to follow-up after initial evaluation (before treatment initiation), 1 (3.7%) was denied insurance authorization for treatment medications, and 1 (3.7%) is pending evaluation. HCV spontaneously resolved (undetectable RNA levels) without treatment in 3 patients (11.1%) (see Table).
- Among the 12 women that were treated, genotype 1a was the most common HCV type (Figure 2).
- Three of the 12 women (25%) were treated during the 3rd trimester of pregnancy, and 9 (75%) in the postpartum period.
- Treatments consisted of sofosbuvir-velpatasvir (8/12 [66.6%]), sofosbuvir-ledipasvir (1/12 [8.3%]), sofosbuvir-velpatasvir-voxilaprevir (2/12 [16.7%]), and glecaprevir-pibrentasvir (1/12 [8.3%]).
- A sustained virologic response to treatment was attained in 7/12 (58.3%) women, and 2/12 (16.7%) are currently on treatment. Among the 9 women in the postpartum group, 1 (11.1%) was lost to follow-up before sustained virologic response was confirmed, and 2 (22.2%) were lost to follow-up after initiating treatment (see Table).

Table. Case Outcomes

Status	N	Regimen
Treated 3rd trimester; SVR	2	sofosbuvir/velpatasvir (1); ledipasvir/sofosbuvir (1)
Treated 3rd trimester; currently on Tx.	1	sofosbuvir/velpatasvir
Treated postpartum; SVR	5	sofosbuvir/velpatasvir/voxilaprevir (2); glecaprevir/pibrentasvir (1); sofosbuvir/velpatasvir (2)
Initiated Tx. post-partum; LTFU	2	sofosbuvir/velpatasvir
Postpartum; on Tx. currently	1	sofosbuvir/velpatasvir
Treated postpartum; completed Tx.; LTFU before SVR confirmation	1	sofosbuvir/velpatasvir
Spontaneous resolution; RNA UD	3	N/A
Missed initial appointment	7	N/A
Evaluated; LTFU before Tx. start	3	N/A
Evaluated; insurance denied Tx.	1	N/A
Pending evaluation	1	N/A

SVR: sustained virologic response; Tx.: treatment; LTFU: loss to follow-up; RNA: ribonucleic acid; UD: undetected

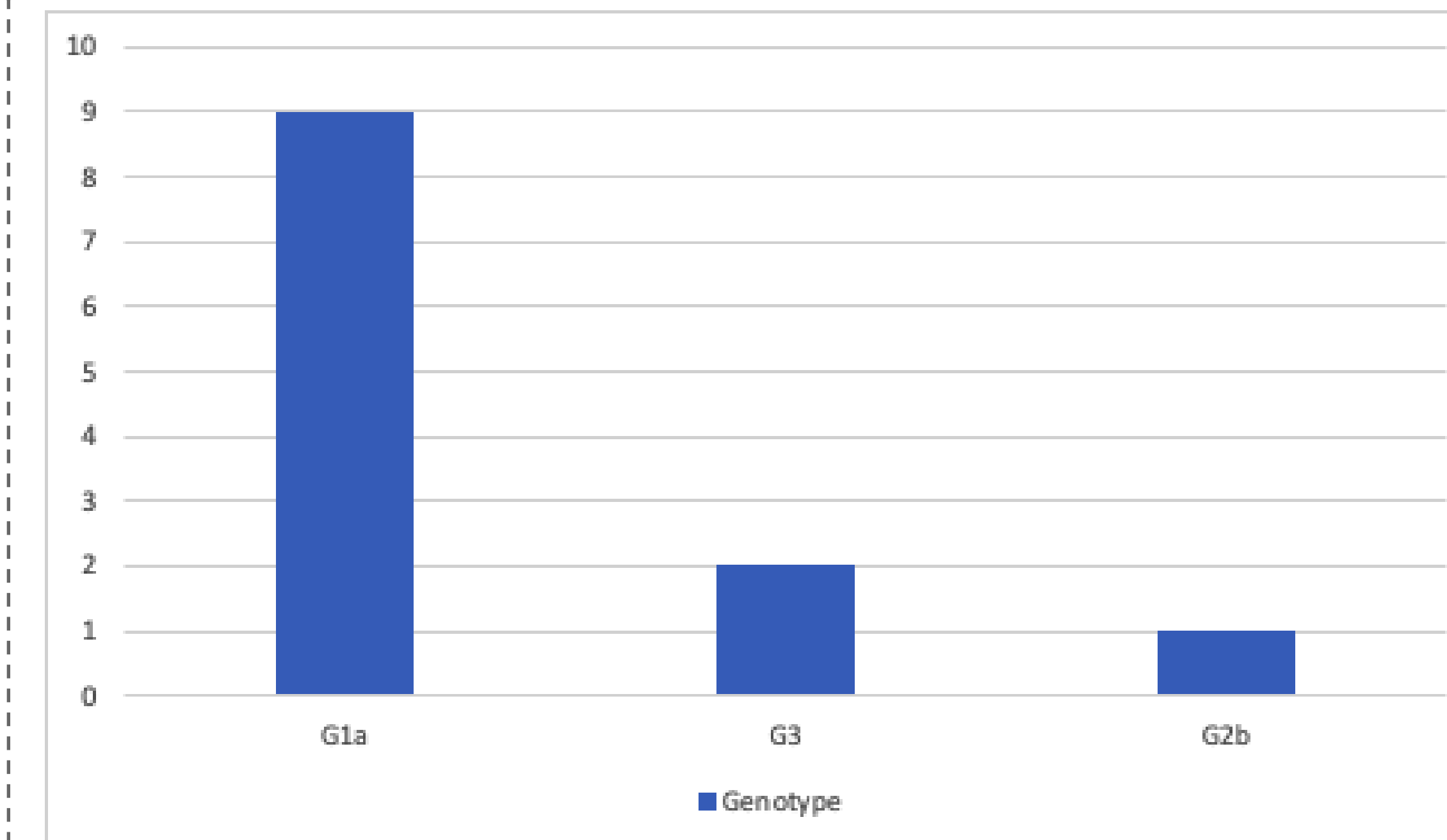


Figure 1: Prevalence of hepatitis C virus among pregnant women who inject drugs

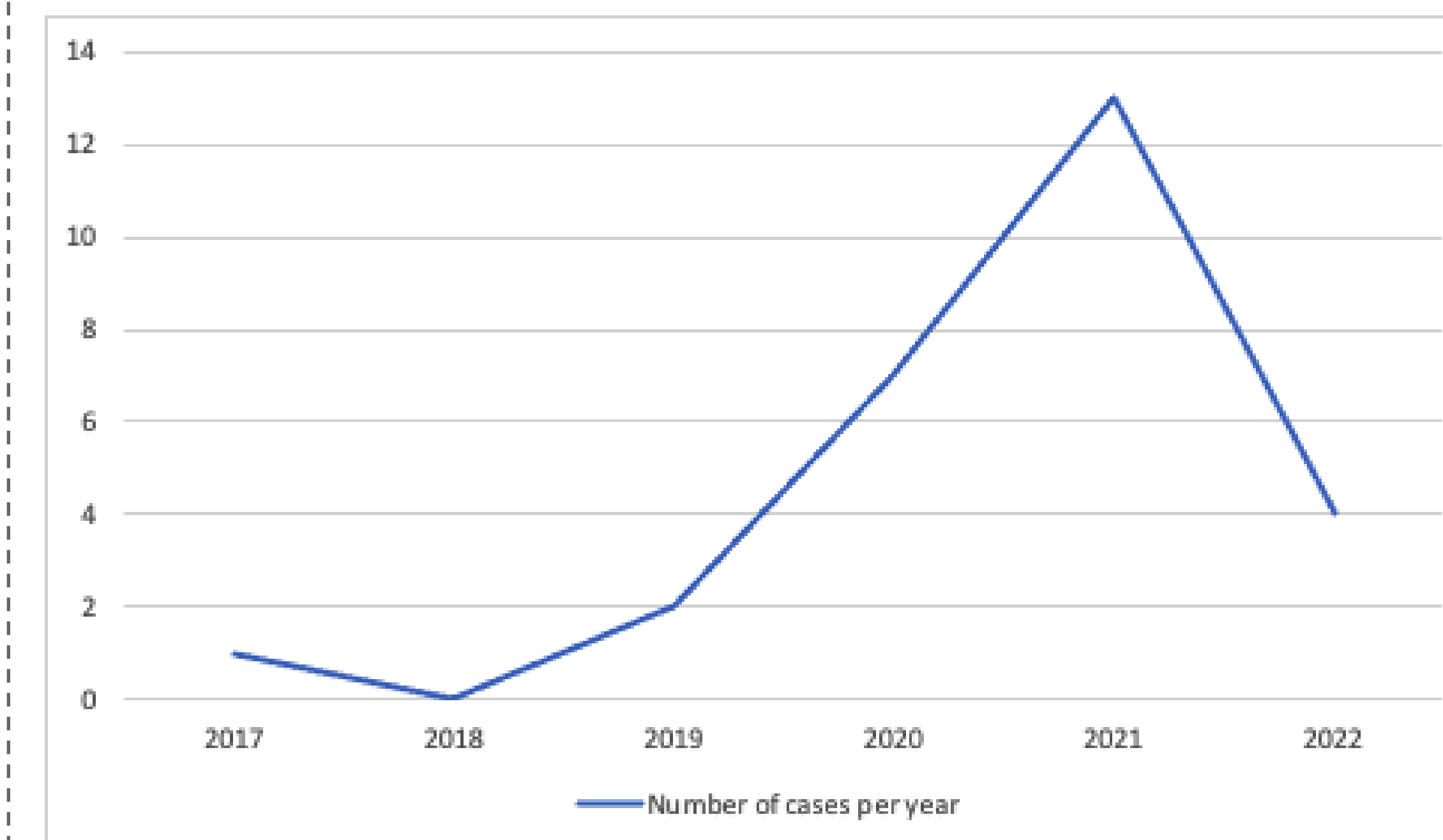


Figure 2: Distribution of HCV genotypes in pregnant women at La Bodega Hepatology Clinic

Conclusion

The number of cases of HCV among pregnant women who inject drugs is increasing. More research is needed regarding treatment among pregnant women. Treatment in the 3rd trimester is feasible thus preventing vertical transmission. Linkage to care may have been impacted by COVID.