Extended Post-Partum Valacyclovir Use for Prevention of HSV1/2 Reactivation

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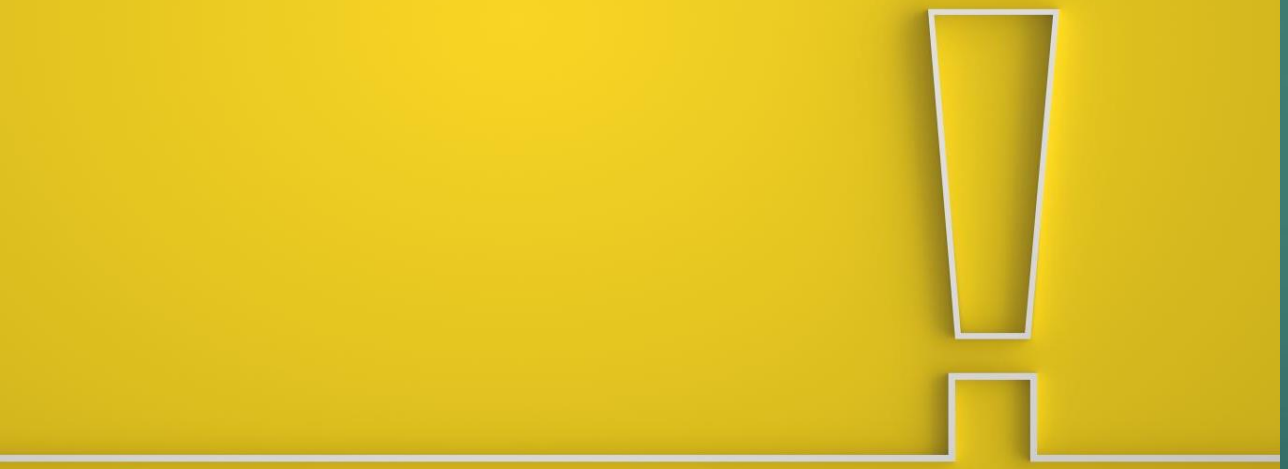
I have no financial interests or relationships to disclose.

Objective



- We investigate the efficacy of extended post-partum Valacyclovir starting at 30 weeks gestation and continued for a minimum of 4-6 months in preventing HSV1/2 reactivation.

Current Guidelines

Current guidelines recommend oral HSV1/2 suppressive therapy starting at 36 weeks, lasting up to 2 weeks post-partum

It is important to note that studies in co-infected women with HSV2 and HIV1 have shown benefits of Valacyclovir for 12 months post-partum.

Immune Reconstitution Inflammatory Syndrome (IRIS)

A state of hyperinflammatory response that usually occurs in the first six months of treatment of HIV/AIDS patients.

IRIS is a poorly understood disease, and its exact mechanism is not yet fully known. It is a state of dysregulated, hyper-inflammatory response against opportunistic infections.

IRIS has been associated with significant morbidity and mortality in HIV/ AIDS patients.

Immune Reconstitution Inflammatory Syndrome (IRIS)

Pregnancy results in an immunocompromised state.

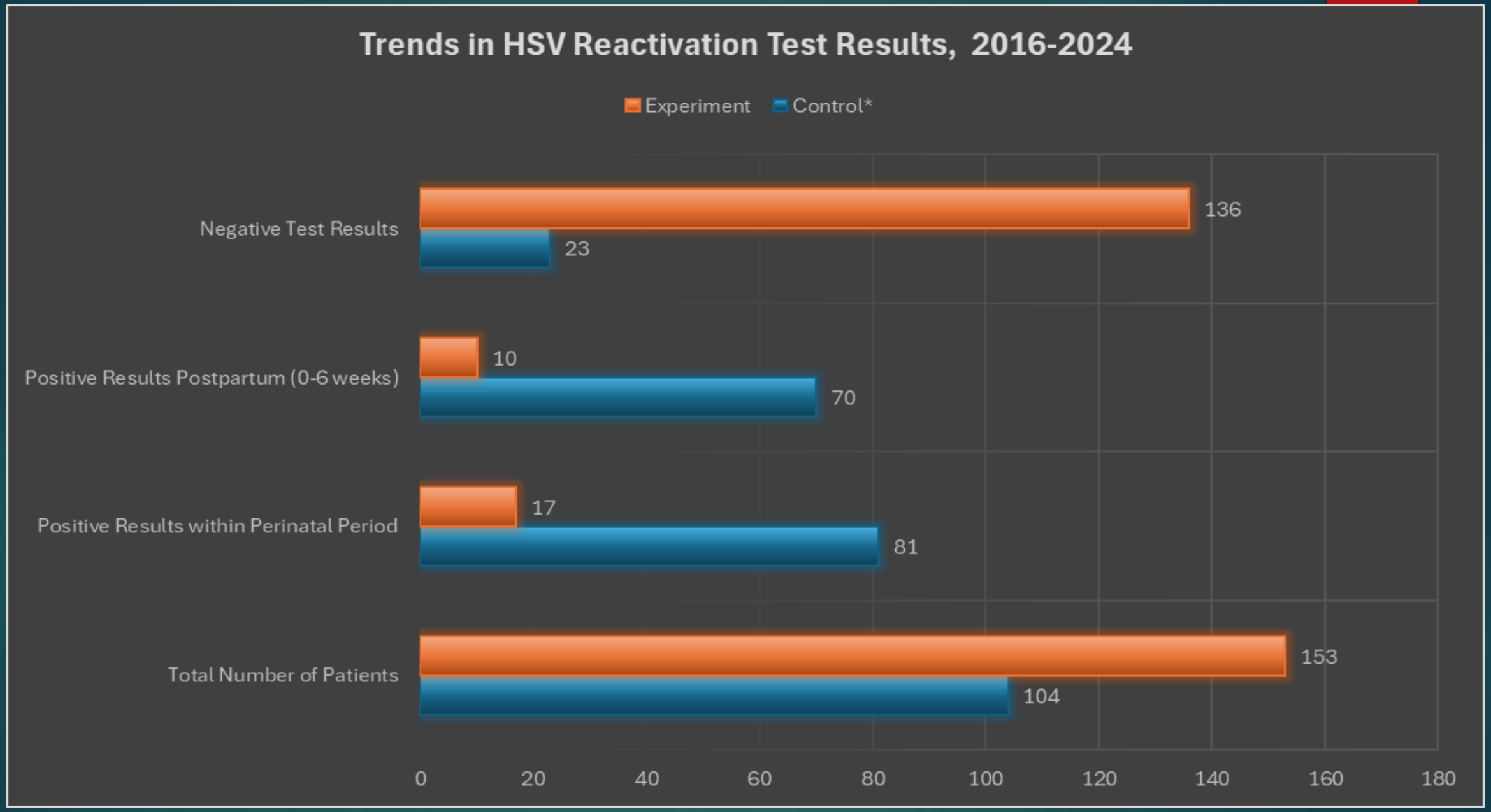
During pregnancy, there is a shift to the activation of Th2 cells and an increased IL-4, IL-5, and IL-10. There is also a suppression of Th1 cells and associated cytokines (IL-12, TNF-a). This results in a state of anti-inflammatory response, needed during pregnancy to prevent any fetal rejections or miscarriages.

After pregnancy, there is a reversal of this process and results in a relative pro-inflammatory state immediately postpartum.

Thus, the immediate postpartum period has an increased risk of IRIS for 2 or more months depending on additional external risk factors. Post-partum infections commonly seen consist of cryptococcosis, herpes virus infection/reactivation, human papillomavirus reactivation, leprosy, tuberculosis, viral hepatitis, and a flare-up of autoimmune conditions such as systemic lupus erythematosus and rheumatoid arthritis.

Methodology

- We have a retrospective and prospective investigation in progress.
- Over the last 8 years, we have prescribed 152 women with a known history of HSV1/2 valacyclovir, 1g daily PO, for a minimum of four months post-partum.
- During acute outbreaks, patients were given 1g BID for 10 days then 1g QD for up to 6 months.
- We have compared our experimental group with a control group based on patients from other physicians with 104 patients with HSV and no treatment.
- **Outbreak in the perinatal period was found in 81 patients of the control group, 77.8% of the patients.**


Trends in HSV Reactivation Test Results, 2016-2024
Experiment
Control*
Negative Test Results
136
23
Positive Results Postpartum (0-6 weeks)
10
70
Positive Results within Perinatal Period
17
81
Total Number of Patients
153
104
0
20
40
60
80
100
120
140
160
180

Results

- Control group: either didn't use acyclovir or used it for only 2 weeks post-partum.
- Confirmed an 85.6% decrease in the number of post-partum outbreaks in HSV1/2 women with at least 4 months of suppressive therapy.
- 17 women of 152 (11.18%) of women had a very light outbreak in the experimental group.
- 81 women of 104 (78%) were positive for HSV in the control group.
- Results were more significant in women with a history of severe oral outbreaks.
- Without treatment, we have seen an increase in HSV oral outbreaks with the majority of cases presenting in the first 8 weeks post-partum, some cases before 6 months post-partum, and a few cases immediately after the suspension of suppressive therapy.

Conclusion

- Despite the known heightened risk for infection for 2 or more months post-partum, prophylactic Valacyclovir prescription beyond 2 weeks is not standard practice.
- We advocate for active prescription of Valacyclovir for a minimum of 4-6 months post-partum to mitigate maternal infection and morbidity during the post-partum period.
- Stress from labor and delivery and the anxiety during the initial lactating period further increases the immunocompromised state of the mother.
- Social influences such as domestic violence and lack of support impact the immune system.
- Additional outbreaks noted once we stop therapy at 6 months post-partum, particularly in high-risk population experiencing social/psychological pressures, adolescence, lack of familial or spousal support, and more.
- This should prompt further investigations with prolonged suppressive therapy for more than 6 months.


Thank you


Q & A