Consistency of Mycobacterium tuberculosis-specific interferon-gamma responses in HIV-1-infected women during pregnancy and postpartum.

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Abstract

Background: We determined the consistency of positive interferon-gamma (IFN-?) release assays (IGRAs) to detect latent TB infection (LTBI) over one-year postpartum in HIV-1-infected women. Methods: Women with positive IGRAs during pregnancy had four 3-monthly postpartum IGRAs. Postpartum change in magnitude of IFN-? response was determined using linear mixed models. Results: Among 18 women with positive pregnancy IGRA, 15 (83%) had a subsequent positive IGRA; 9 (50%) were always positive, 3 (17%) were always negative, and 6 (33%) fluctuated between positive and negative IGRAs. Women with pregnancy IGRA IFN-?>8 spot forming cells (SFCs)/well were more likely to have consistent postpartum IGRA response (odds ratio: 10.0; 95% confidence interval (CI): 0.9-117.0). Change in IFN-? response over postpartum was 10.2 SFCs/well (95% CI: -1.5-21.8 SFCs/well).Conclusion: Pregnancy positive IGRAs were often maintained postpartum with increased consistency in women with higher baseline responses. There were modest increases in magnitude of IGRA responses postpartum.