

ABSTRACT

BACKGROUND:

In Sub-Saharan Africa, prevalence estimates of hepatitis C virus (HCV) vary widely.

OBJECTIVES:

To assess the prevalence of HCV infection among HIV-infected, pregnant women screened for a large clinical trial in Lilongwe, Malawi.

STUDY DESIGN:

Plasma from 2041 HIV-infected, pregnant women was screened for anti-HCV IgG using a chemiluminiscent immunometric assay (CIA). Specimens with a signal-cut-off ratio ≥ 1.00 were considered reactive and those with S/Co ratio < 1.00 non-reactive. All CIA-reactive specimens were tested by a recombinant immunoblot assay (RIBA) for anti-HCV and by PCR for HCV RNA.

RESULTS:

Of 2041 specimens, 110 (5.3%, 95% CI: 4.5-6.5%) were CIA reactive. Of the 109 CIA reactive specimens available for RIBA testing, 2 (1.8%) were positive, 28 (25.7%) were indeterminate, and 79 (72.5%) were negative. All CIA-reactive specimens were HCV RNA negative (n=110). The estimated HCV prevalence based on the screening assay alone was 5.3%; based on supplemental RIBA testing, the status of HCV infection remained indeterminate in 1.4% (28/2040, 95% CI: 0.1-2.0) and the prevalence of confirmed HCV infections was 0.1% (2/2040, 95% CI: 0-0.4%).

CONCLUSIONS:

HCV seroprevalence among HIV-infected, pregnant women in Malawi confirmed by supplemental RIBA HCV 3.0 is low (0.1%); CIA showed a high false-reactivity rate in this population.