Correspondence

Hepatitis C Virus Transmission in People Who Inject Drugs: Swabs May Not Be the Main Culprit

TO THE EDITOR—We read with interest the recent article by Thibault et al [1], which described laboratory analyses of injection equipment collected from people who inject drugs in France. In particular, the detection of hepatitis C virus (HCV) RNA in 80% of pooled samples of alcohol and cotton swabs raises concerns about the possible role of swabs in HCV transmission. While the accompanying editorial notes that “[c]onfirming these results with epidemiologic studies may take time” [2p1820], we present early epidemiologic data on this relationship.

Between 1999 and 2002, we conducted a longitudinal study of anti-HCV–negative people who inject drugs in 3 sites in New South Wales, Australia [3–5]. A total of 68 incident cases of HCV infection were observed (30.8 cases/100 person-years; 95% confidence interval [CI], 24.3–39.0). Independent predictors of serocconversion were injection history of <1 year (adjusted hazard ratio [HR], 4.32; 95% CI, 1.89–9.84), being recruited through outreach (adjusted odds ratio, 4.68; 95% CI, 1.61–13.60), shared use of filters (adjusted HR, 2.21; 95% CI, 1.15–4.23), mainly injecting cocaine (adjusted HR, 1.87; 95% CI, 1.03–3.40), and female sex (adjusted odds ratio, 1.66; 95% CI, 99–2.77) [3].

The baseline prevalence of swab sharing (defined as “wiping your injection site with a swab previously used to wipe another person’s injection site in the last 6 months”) was 6%. In contrast to receptive syringe sharing (unadjusted HR, 1.99; 95% CI, 1.22–3.26), sharing swabs was not associated with HCV seroconversion (unadjusted HR, 0.68; 95% CI, 0.21–2.15).

As suggested in the accompanying editorial [2], ideally the association between swab sharing and HCV seroconversion should be studied in cohorts with a low prevalence of receptive syringe and container sharing and at least a modest amount of swab sharing. Despite being conducted in a setting of high harm reduction coverage including needle and syringe programs and opioid substitution treatment [6], our cohort had both high prevalence of receptive syringe sharing (27% in the previous 6 months) and container (ie, spoon) sharing (25%), relative to swab sharing (6%) at baseline.

While the prevalence of swab sharing was low in our cohort and we were unable to detect a statistically significant relationship between this behavior and incident HCV infection, it would appear prudent to continue to emphasize avoidance of swab reuse in this population.

Notes

Financial support. This work was supported by the Australian National Health and Medical Research Council (NHMRC; grant 993824). L. M. is supported by the award of an NHMRC Senior Research Fellowship.

Potential conflicts of interest. All authors: No reported conflicts.

All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

Lisa Maher and Handan Wand
The Kirby Institute, University of New South Wales, Sydney, Australia

References


Received 11 November 2011; accepted 19 December 2011; electronically published 25 April 2012.

Correspondence: Lisa Maher, PhD, The Kirby Institute, University of New South Wales, Sydney, Australia (l.maher@unsw.edu.au).

The Journal of Infectious Diseases 2012;205:1892 – © The Author 2012. Published by Oxford University Press on behalf of the Infectious Diseases Society of America. All rights reserved. For Permissions, please e-mail: journals.permissions@oup.com.

DOI: 10.1093/infdis/jis286