

FIVE THINGS TO KNOW ABOUT ...

Acute primary HIV infection

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Although most patients with acute HIV infection are symptomatic, the diagnosis is often missed

In a descriptive cohort study, 41 of 46 people with acute HIV infection sought medical attention for related symptoms.¹ Seventy per cent reported experiencing such symptoms as fever, fatigue, sore throat and weight loss for a median of 14 days. Only 25% received a correct diagnosis.

Routine HIV testing will miss most acute infections

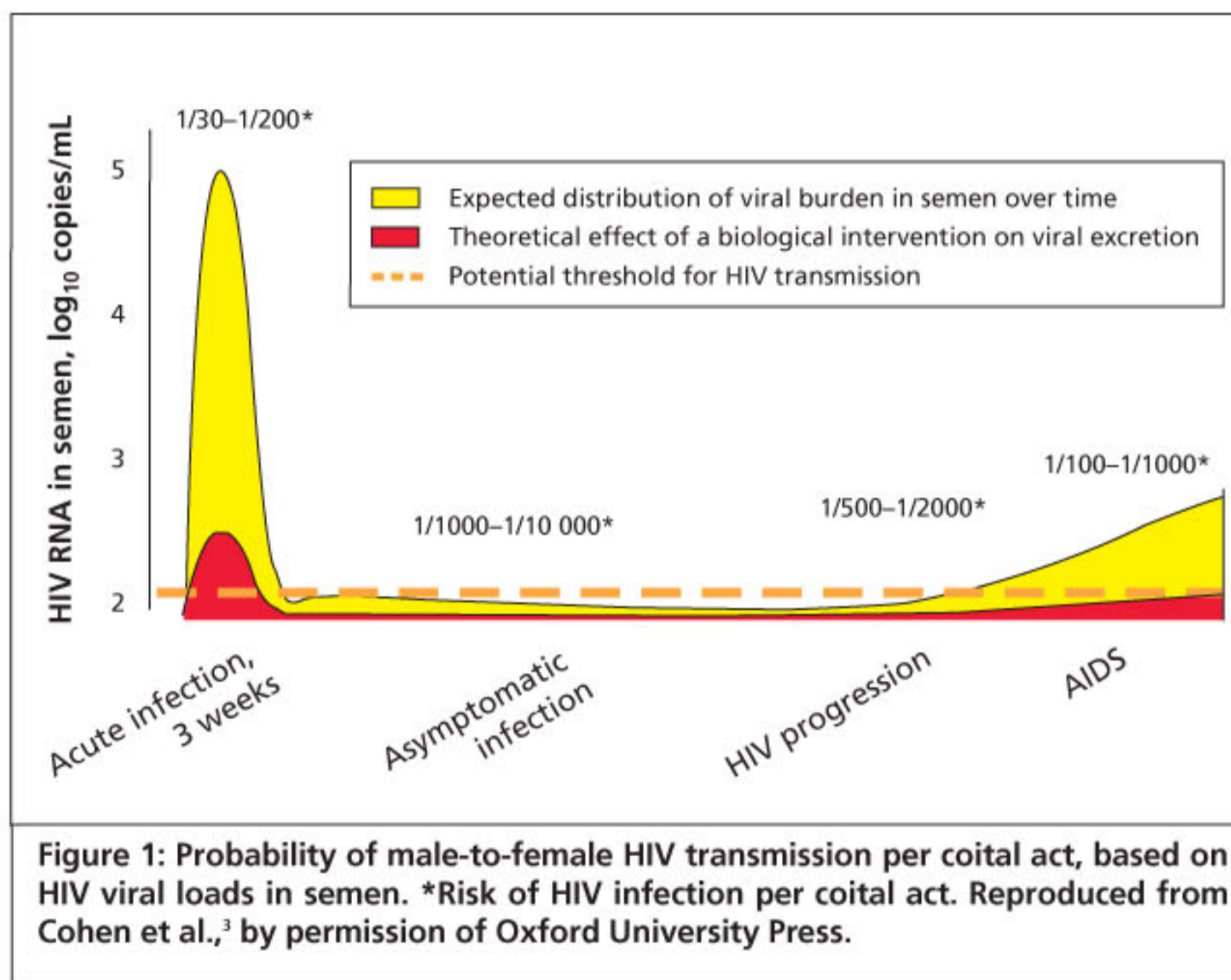
The usual HIV screening tests — third- and fourth-generation enzyme immunoassays — begin to identify infection within 22 days after exposure.⁵ However, patients are often advised to wait 12 weeks after risky behaviour before testing.⁵ This will result in missed opportunities to diagnose acute HIV infection.

HIV infection can often be detected within 22 days after exposure

Third-generation enzyme immunoassays start to detect anti-HIV antibodies within 20–22 days after exposure; fourth-generation enzyme immunoassays, which test for p24 antigen and anti-HIV antibodies, can yield positive results within 16–18 days.⁵ RNA nucleic acid amplification testing starts to detect HIV infection within 7–14 days. At \$75 per test, these RNA tests are too costly for routine use and are typically reserved to detect pre-seroconversion infection in at-risk prenatal women and to rule out neonatal infection.

Risk of transmission may be greatest within three months after infection

Well-designed studies have shown very high HIV viral loads in blood, semen and vaginal secretions during the first two to three months after infection (Figure 1).² Research suggests that up to 49% of transmission events could be ascribed to recently infected index subjects.⁴



Most patients who know they have acute HIV infection will change their behaviour

In one study, 76% of 98 high-risk homosexual men with acute HIV infection eliminated the risk of forward HIV transmission for 12 weeks after diagnosis.⁶ Early diagnosis also allows for timely initiation of treatment.

For references, see Appendix 1 (available at www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.101605/-/DC1).

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