New HIV testing guidelines in BC

A 23-year-old male presents to student health services with a mononucleosis-like syndrome. A 42-year-old previously healthy, married woman presents to her long-time family physician with a 3-month history of easy bruising and weight loss. A 57-year-old man presents to the emergency department with fever and shortness of breath. A 60-year-old man, at his first visit with a new family physician, is screened for type 2 diabetes. Would you include an HIV test in the blood work ordered for these patients? Until now, most of us would have said "no." And this is what the provincial health officer's new recommendations aim to change by recommending that clinicians know the HIV status of all patients under their care.

Why the change?

Until now, many physicians offered an HIV test when a patient seemed at risk for acquiring HIV or presented with signs and symptoms of advanced HIV disease. Only in the antenatal setting was an HIV test offered to all patients, regardless of the patient's or the provider's perception of risk. Routine HIV testing in pregnancy has been tremendously successful, virtually eliminating mother-to-child transmission of HIV in British Columbia. But the success of routine HIV testing in pregnancy has not been translated to the general population, for whom HIV testing has largely remained based on risk perception.

Until evidence became compelling that HIV diagnosis at the earliest opportunity has significant clinical and public health benefits, this approach did not come into question. Now, with advances in therapy, HIV-positive patients on treatment can expect to live symptom and side-effect free. If highly active antiretroviral therapy starts early in the course of infection, an HIV-infected individual's life expectancy approaches that of the general population. A recent study estimated that a 20-year-old, diagnosed with HIV and treated early, can expect to live to 73.6 years of age.[1]

Therapy not only adds years and quality to life, it also dramatically reduces the likelihood of transmitting the virus to an HIV-negative partner, enabling patients to have fulfilling relationships and healthy reproductive futures.[2] When the benefit of early diagnosis and treatment became clear, several countries, including the United States and United Kingdom, examined how effective the traditional risk-based approach to HIV testing was at diagnosing patients early. They found that testing, based on risk alone, was not achieving the goal of early diagnosis. Rather, substantial numbers of patients remained unaware of their diagnosis or received their diagnosis late despite multiple contacts with acute and primary care. They also found the routine offer of an HIV test in health care to reduce stigma and be feasible and highly acceptable to patients and providers.

Multiple analyses also demonstrated that routine testing in health care settings, even in relatively low prevalence populations, is as cost effective as other commonly accepted interventions and is, therefore, justified on both clinical and cost-effectiveness grounds.[3] These findings resulted in recommendations of routine HIV testing in health care settings by the US Centers for Disease Control and Prevention, US Preventive Services Task Force, and the UK Health Protection Agency.[4-7]

In British Columbia, the 4-year STOP HIV/AIDS initiative gave us an opportunity to pilot and evaluate expanded HIV testing in health care. This pilot found that, as in other jurisdictions, late diagnosis of HIV was common. In Vancouver, before the pilot started in 2009, 60% of new diagnoses were made after patients should have been in treatment, and nearly 20% of patients were diagnosed with advanced HIV disease. Late diagnoses were not limited to those who were disengaged from the health care system. Most patients diagnosed late had had multiple missed opportunities for earlier diagnosis in acute and primary care. As elsewhere, when an HIV test was routinely offered to patients in hospital and primary care, most patients chose to have the test; at St. Paul's Hospital, Vancouver General Hospital, and Mount Saint Joseph Hospital, 94% of eligible patients accepted the offer of an HIV test as part of routine hospital care.[8] Routine HIV testing resulted in diagnoses in a broad range of patients. Some had established HIV infection and had had extensive previous diagnostic evaluation but no HIV test. Others were diagnosed with acute HIV infection after presenting with nonspecific systemic symptoms. Diagnoses from routine testing included those with no previous HIV tests as well as those whose risk was known to their primary care provider, and who had many previous HIV tests. Our findings confirm those of other jurisdictions: routine HIV testing reduces stigma, is feasible, is acceptable to patients and providers, and leads to earlier diagnosis of HIV.

These new recommendations, summarized below, aim to help pro-

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viders offer HIV testing whenever indicated by clinical or public health criteria. They were drafted by a working group of rural and urban family physicians and specialists in general medicine, HIV care, sexual health, public health, and laboratory medicine. These guidelines recommend that health care providers know the HIV status of all patients under their care.

Specifically, we recommend that providers offer an HIV test:

- Routinely (every 5 years) to all patients aged 18 to 70 years.
- Routinely (every year) to all patients aged 18 to 70 years who belong to populations with a higher burden of HIV infection.
- Once at age 70 or older if the patient's HIV status is not known.

And offer an HIV test to patients, including adults 18 to 70, youth, and the elderly, whenever:

- They present with a new or worsening medical condition that warrants laboratory investigation.
- They present with symptoms of HIV infection or advanced HIV disease.
- They or their providers identify a risk for HIV acquisition.
- They request an HIV test.
- They are pregnant.

Detailed recommendations are available at hivguide.ca.

Frequency of testing of asymptomatic patients is dependent on local epidemiology and testing practices. The optimum frequency of HIV testing in British Columbia is not yet known and the recommended frequency for testing may change over time. Testing rates, diagnostic yield, and stage of disease at diagnosis will be evaluated, leading to refinement of these recommendations. With this new guidance, British Columbia joins other jurisdictions in promoting the earliest possible diagnosis of HIV infection for all patients.

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