Earlier AIDS drug treatment would save 76,000 lives over 5 years

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(PhysOrg.com) -- Early initiation of lifesaving antiretroviral therapies should be the standard of care for all HIV-infected patients, even those in countries with limited medical and financial resources, according to a study led by Harvard Medical School (HMS) researchers at Massachusetts General Hospital (MGH) and the Desmond Tutu HIV Centre, University of Cape Town, South Africa.

The team reports in the Aug. 4 Annals of Internal Medicine that starting antiretroviral therapy (ART) when the level of CD4 T cells drops below a threshold of 350 per microliter of blood, compared with below 250, would prevent nearly 76,000 deaths and avert 66,000 opportunistic infections over the next five years at an estimated cost of $1,200 per year of life saved. The study's publication coincides with the International AIDS Society Conference meeting which started yesterday in Cape Town.

The study provides strong support for broadening the eligibility standards for ART in settings with sufficient access to drugs, the authors note. In the U.S. and other developed countries, ART is usually initiated when the CD4 count - a measure of immune system function - drops below 350. Recognizing that ART is both costly and can have significant side effects, the 2006 World Health Organization (WHO) treatment guidelines suggest waiting until CD4 counts drop below 200 or until patients develop AIDS-related complications.

"While those standards accommodate the limited resources and short

supply of medications in many settings, the greater prevalence of tuberculosis and other opportunistic infections in places like South Africa argue for earlier treatment initiation, even before the results of ongoing clinical trials are known," says study leader Rochelle Walensky of the MGH Division of Infectious Disease and associate professor of medicine at HMS.

Definitive clinical trial findings will not be available for several years. Yet in countries like South Africa, which currently has the world's highest burden of HIV infection, information is needed today to guide treatment policies and practices. To address this need, Walensky and colleagues developed a mathematical model to simulate HIV treatment and its associated health and economic outcomes. The model calculated the additional costs of earlier treatment, its potential toxicities and its benefits, including TB prevention. It also calculated how much delaying ART would shorten patients lives and then estimated the cost per extra year of life gained - a standard measure of cost-effectiveness - of earlier ART initiation.

"The time has come to act on the information we now have, nearly all of which supports starting treatment earlier. We can re-evaluate the situation after the trials, but until those results are available, the evidence points to saving lives with earlier treatment," says co-author Robin Wood, director of the Desmond Tutu HIV Centre at the Institute of Infectious Diseases and Molecular Medicine, University of Cape Town. The center is a leading HIV clinical research group in South Africa .

Provided by Harvard University (news : web)

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