HIV: The benefits of prophylaxis of tuberculosis are confirmed

October 11 2017

A long-term follow-up study in the ANRS TEMPRANO trial confirms that tuberculosis chemoprophylaxis in HIV-infected people is more than ever relevant in resource-limited countries. This prophylactic use of drugs reduces mortality, even among people taking antiretroviral treatment who have a high CD4+ T cell count. ANRS TEMPRANO was conducted by researchers of the Ivory Coast ANRS site, which comprises teams from Inserm (U1219, University of Bordeaux), the Infectious and Tropical Diseases Department of the Treichville University Hospital, and eight other infection treatment centers in Abidjan. The results of this trial will be published in the 9 October 2017 issue of *The Lancet Global Health* and should encourage countries with a heavy tuberculosis burden to apply the relevant WHO recommendations.

Tuberculosis is the leading cause of death among HIV-infected people in sub-Saharan Africa. In the 1990s, several studies showed that HIV-infected people who take the antibiotic isoniazid for six to 12 months are at lower risk of developing tuberculosis. On the basis of these studies, since 1993, the WHO has recommended that people living with HIV in countries where tuberculosis is rife should take isoniazid for six months. However, this recommendation is seldom applied because it was deemed obsolete following the advent of antiretrovirals that restore immunity and hence lower the risk of tuberculosis. ANRS TEMPRANO has reassessed the benefits of isoniazid prophylaxis in the era of early antiretroviral treatment.
ANRS TEMPRANO was conducted between 2008 and 2015, and showed that six-month isoniazid prophylaxis for tuberculosis and early antiretroviral treatment both reduced the risk of severe morbidity in the first two years of follow-up. Published in the *New England Journal of Medicine* in 2015, these results greatly contributed to the formulation of WHO treatment recommendations. ANRS TEMPRANO participants were then followed up for an average of 4.5 years, and the findings are now published in *The Lancet Global Health*. This long-term follow-up shows that tuberculosis chemoprophylaxis reduces not only severe morbidity, but also mortality, and that this benefit, which is independent of and complementary to that of antiretroviral treatment, lasts at least six years after administration.

Professor François Dabis, the Director of the ANRS, says, "We now have irrefutable evidence of the value of tuberculosis chemoprophylaxis in HIV-infected people in resource-limited countries in the era of antiretrovirals, even when these are initiated very early. The WHO recommendations should more than ever be applied."
