中文題目：雞尾酒抗病毒藥物治療增加愛滋病人短期之伺機性感染風險

英文題目：Highly active antiretroviral treatment increases the short-term risk of incident opportunistic infections among People Living with HIV/AIDS

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Background: Highly active antiretroviral therapy (HAART) causes a rapid increase of $CD4^+$ T cells during the first three to six months of treatment and may enhance the development of opportunistic infections (OIs). However, the short-term and long-term effects of HAART exposure on incident OIs has not been extensively studied. This nationwide population-based cohort study aimed to determine the short-term and long-term effects of HAART on incident OIs in people living with HIV/AIDS (PLWHA) in Taiwan.

Methods. From Jan. 1, 2000, we identified adult PLWHA from Taiwan CDC HIV Surveillance System. HIV-infected individuals were defined as positive HIV-1 Western blot. All PLWHA were followed until Dec. 31, 2014, and observed for occurrence of OIs. The time-dependent Cox proportional hazards model was used to determine the short-term (≤180 days) and long-term (>180 days) effects of HAART on incident OIs among PLWHA, while considering death as a competing risk event.

Results. Of the 26,258 PLWHA, 6413 (24.4%) had incident OIs during a mean follow-up period of 5.09 years. After adjusting for age, sex , comorbidities, and AIDS status, PLWHA receiving HAART were more likely to develop new onset of OIs than those not receiving HAART, including tuberculosis (AHR 1.88; 95% CI 1.44-2.44), disseminated mycobacterium avium complex infection (AHR 11.7; 95% CI 5.39-25.5), cytomegalovirus infection (AHR 7.42; 95% CI 5.65-9.74), Pneumocystis jirovecii pneumonia (AHR 3.41; 95% CI 2.94-3.94), cryptococcal meningitis (AHR 5.13; 95% CI 3.26-8.09), candidiasis (AHR 2.14; 95% CI 1.86-2.46), penicillium marneffei infection (AHR 2.97; 95% CI 1.79-4.93), and toxoplasma encephalitis (AHR 2.84; 95% CI 1.31-6.13). While short-term and long-term effects of HAART on incident OIs considered, HAART was a risk factor for OIs development in the short-term, but was a protective factor for OIs development in the long-term.

Conclusion. HAART increased the risk of OIs development in the short-term. PLWHA receiving HAART should be monitored carefully for OIs development during the early phase of treatment.

Keywords: tuberculosis, HIV, highly active antiretrovival treatment