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Lung microbiome similar with/without HIV

August 26 2015

(HealthDay)—Lung microbiomes are similar in patients with and without HIV, although oral microbiomes do differ significantly, according to a study published online Aug. 6 in the *American Journal of Respiratory and Critical Care Medicine*.

James M. Beck, M.D., from University of Colorado Denver in Aurora, and colleagues analyzed 16S rRNA sequencing data from oral washes and bronchoalveolar lavages (BALs) obtained from 86 HIV-uninfected individuals, 18 HIV-infected individuals who were treatment naive, and 38 HIV-infected individuals receiving antiretroviral therapy.

The researchers found that microbial populations differed in the oral washes among the subject groups (*Streptococcus*, *Actinomyces*, *Rothia*, and *Atopobium*), but there were no individual taxa that differed among the BALs. Similar patterns were seen in oral washes and BALs from HIV-uninfected individuals and HIV-infected individuals receiving

antiretroviral therapy, with multiple taxa differing in abundance. The pattern seen in HIV-infected individuals who were treatment naive differed from the other two groups. CD4 cell counts did not affect the oral or BAL microbiomes.

"The overall similarity of the microbiomes in participants with and without HIV infection was unexpected, since HIV-infected individuals with relatively preserved CD4 cell counts are at higher risk for lower respiratory tract infections, indicating impaired local immune function," the authors write.

More information: Full Text (subscription or payment may be required)