Opioids Tied to Higher Pneumonia Risk in People With HIV

The painkillers may suppress the immune system.

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Taking prescribed opioids is associated with a higher risk of pneumonia among people with and without HIV, according to a new study. Past research has suggested that opioids may suppress the immune system—for example, by inhibiting coughing, breathing and mucus secretion.

Publishing their findings in JAMA Internal Medicine, researchers studied data on both HIV-positive and HIV-negative patients of the Veterans Health Administration enrolled in the Veterans Aging Cohort Study. They assembled a cohort of 4,246 people who had been hospitalized for pneumonia and matched them 1 to 5 with a control group of 21,146 people who did not experience pneumonia-prompted hospitalization, matching the controls by age, sex, race, length of medical observation and HIV status.

The study cohort members were further categorized according to their exposure to opioids during the previous 12 months, including whether they took none, took them in the past or were currently taking them; whether they took a median daily dose of a morphine equivalent that was low (less than 20 milligrams), medium (20 to 50 mg) or high (greater than 50 mg); and whether the opioids they took had immune-suppressing properties or were unknown to have such properties.

The average age of the cohort members was 55 years old and 98.9 percent were male.

The factors by which various categories of prescribed opioid use were associated with a greater risk of hospitalization for pneumonia, compared with taking no opioids, included: currently taking medium doses of opioids with unknown or no immunosuppressive properties, 1.35-fold increased risk, and with immunosuppressive properties, 2.07-fold increased risk; currently taking high doses of opioids with unknown or no immunosuppressive properties, 2.07-fold increased risk, and immunosuppressive properties, 3.18-fold increased risk; and any past use of opioids with no immunosuppressive properties, 1.24-fold increased risk, and immunosuppressive properties, 1.42-fold increased risk.

These relative risks associated with opioid use were consistently higher among those with HIV compared with the HIV-negative individuals.

To read a press release about the study, click here.

To read the study abstract, click here.

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