COVID-19 Research Watch
June 1, 2020

CLINICAL PRESENTATION

Description of COVID-19 in HIV-infected individuals: a single-centre, prospective cohort[1]

This observational prospective cohort study conducted in Madrid, Spain, found a SARS-CoV-2 incidence of 1.8% (95% CI 1.3-2.3%) among HIV-infected individuals. Comorbidities, including hypertension, high BMI, and diabetes, as well as previous use of tenofovir were associated with COVID-19 diagnosis. No significant differences were found in clinical characteristics and outcomes between individuals with recent CD4 counts below vs above 200 cells/μL. The mortality rate reported for HIV-SARS-CoV-2 coinfected individuals was lower than that of the general population, but severe disease and ICU-admission rates were higher for the coinfected population. The authors suggest that HIV-infected individuals should be treated for COVID-19 with the same standard of care applied to the general population.

Clinical impact of COVID-19 on patients with cancer (CCC19): a cohort study[3]

This cohort study was conducted among COVID-19 patients with current or past hematological malignancy or invasive solid tumors in the USA, Canada, and Spain. Patients with non-invasive cancers including non-melanomatous skin cancer, in-situ carcinoma, or precursor hematological neoplasms were excluded. A total of 928 patients with a median age of 66 years (30% being aged >75 years) and 50% males were enrolled. The study found increased age (per 10 years; adjusted odds ratio [aOR] 1·84), male sex (aOR 1·63), former smoker (aOR 1·60), ≥2 comorbidities (aOR 4·50), Eastern Cooperative Oncology Group (ECOG) performance status of 2 or higher (aOR 3·89), active cancer (aOR 5·20), and treatment with both azithromycin plus hydroxychloroquine (aOR 2·93) were associated with increased 30-day mortality among COVID-19 patients. Race and ethnicity, obesity, type of malignancy, type of anticancer therapy, and recent surgery were not associated with the 30-day all-cause mortality. The study findings highlight the increasingly negative effects of COVID-19 on outcomes among cancer patients but recommend larger studies with longer follow up to provide a more definitive description in such patients.

NON-CLINICAL TRENDS

Prescription Fill Patterns for Commonly Used Drugs During the COVID-19 Pandemic in the United States[4]

Using claims data from all-payer US pharmacy data from 14,421 zip codes across 50 states, trends in mean weekly prescriptions and dispensing of hydroxychloroquine/chloroquine, azithromycin, and other top 10 drugs dispensed were compared between February – April 2020 and February – April 2019. The study found the increase in 2020 with fills for hydroxychloroquine/chloroquine were the highest, increasing by 1977% for the 28-tab refill, 179% for the 28 to 60-tab refill, and 182% for the more than 60-tab refill. Furthermore, the use of ACE inhibitor (lisinopril) and ARB (losartan) did not substantially decline compared with other commonly prescribed medications for chronic conditions despite initial fears of these drugs causing increased susceptibility to COVID-19.

Mental Health Outcomes Among Frontline and Second-Line Health Care Workers During the Coronavirus Disease 2019 (COVID-19) Pandemic in Italy[2]

Based on an online questionnaire spread via social networks using a snowball technique, this cross-sectional study found substantial mental health issues among frontline and second-line health care workers (HCWs). Approximately 50% of the 1379 respondents endorsed posttraumatic stress symptoms (PTSS) and 25% showed symptoms of depression. All investigated outcomes, except for insomnia, were significantly associated with younger age and female sex. Being a frontline HCW was significantly associated with PTSS, with an odds ratio of 1.37, prompting authors to suggest implementing specific interventions for HCWs to prevent long-term mental health outcomes.

ADDITIONAL RESOURCES
UCSF Library COVID-19 Research and Information Resources
UCSF Institute for Global Health Sciences COVID-19 Resources
UC Davis One Health Institute COVID-19 FAQs
Harvard Viswanath Lab Myths vs Facts

Note on this Document: This document was assembled by graduate and doctoral students attending the University of California, San Francisco with the intent of facilitating the rapid dissemination of information to the global community in order to help during this time. Sigal Maya and Johnson Lyimo contributed to these summaries. This work is volunteer based.

References:

1   Vizcarra P, Pérez-elías MJ, Quereda C, *et al.* Articles Description of COVID-19 in HIV-infected individuals : a single-centre , prospective cohort. 2020; **3018**: 1–11.

3   Kuderer NM, Choueiri TK, Shah DP, *et al.* Articles Clinical impact of COVID-19 on patients with cancer (CCC19): a cohort study. 2020; **6736**: 1–13.

4   Vaduganathan M, van Meijgaard J, Mehra MR, Joseph J, O'Donnell CJ, Warraich HJ. Prescription Fill Patterns for Commonly Used Drugs During the COVID-19 Pandemic in the United States. *Jama* 2020; **921**: 5–7.

4   Rossi R, Socci V, Pacitti F, *et al.* Mental Health Outcomes Among Frontline and Second-Line Health Care Workers During the Coronavirus Disease 2019 (COVID-

19) Pandemic in Italy. *JAMA Netw open* 2020; **3**: e2010185.