COVID-19 Digest Issue 7

June 9, 2020

CLINICAL PEARL

- Obesity and severe COVID-19 illness: In a retrospective analysis of 775 COVID-19 patients with obesity in New York City, patients <60 years old with a BMI of 30-34 were 2.0 and 1.8 times more likely to be admitted to acute care and critical care/ICU, respectively, compared to patients with a BMI<30. Patients with a BMI ≥ 35 were 2.2 and 3.6 times more likely to be admitted to acute care and critical care/ICU. In a French retrospective study of 124 COVID-19 patients admitted to the ICU, the proportion of patients requiring mechanical ventilation increased with BMI category, with the highest proportion in patients with a BMI >35. The same study found the odds ratio of mechanical ventilation in patients with a BMI >35 vs BMI <25 was 7.36, and the need for mechanical ventilation was significantly associated with BMI, independent of age, diabetes and hypertension.

The observed increased risk in obese patients who are less than 60 years old raises an important new insight, as this age demographic was previously considered lower risk. Providers should therefore strongly consider a patient’s BMI in their clinical decision-making. Obesity will likely play a significant role in the COVID-19 pandemic in the USA, since approximately 42% and 9% of US adults are considered obese and severely obese respectively.

PUBLIC HEALTH UPDATES

- San Mateo County Health Officer revised the shelter in place order dated June 4th to allow outdoor dining and charter boat operations with safety measures and other restrictions to ensure social distancing. It also amends the guidelines for funerals. Appendices, which can be found on the San Mateo County Health Officer Statements and Orders webpage, are also updated to reflect the revised order.

ACADEMIC/RESEARCH PAPERS

- Lancet
  - Prevalence of obesity among adult inpatients with COVID-19 in France
  - Detection of SARS-CoV-2 in human breastmilk
- JAMA
  - Effect of Convalescent Plasma Therapy on Time to Clinical Improvement in Patients With Severe and Life-threatening COVID-19A Randomized Clinical Trial
  - Postmortem Examination of Patients With COVID-19
  - Caring for Women Who Are Planning a Pregnancy, Pregnant, or Postpartum During the COVID-19 Pandemic
  - Association Between Mode of Delivery Among Pregnant Women With COVID-19 and Maternal and Neonatal Outcomes in Spain
  - Venous Thrombosis Among Critically Ill Patients With Coronavirus Disease 2019 (COVID-19)
  - Multisystem Inflammatory Syndrome Related to COVID-19 in Previously Healthy Children and Adolescents in New York City
  - SARS-CoV-2–Related Inflammatory Multisystem Syndrome in Children Different or Shared Etiology and Pathophysiology as Kawasaki Disease?
COVID-19 Digest Issue 7

- **JAMA Pediatrics**
  - Children in the Eye of the Pandemic Storm—Lessons From New York City
  - Epidemiology, Clinical Features, and Disease Severity in Patients With Coronavirus Disease 2019 (COVID-19) in a Children’s Hospital in New York City, New York

- **BMJ Journals**
  - Kawasaki-like multisystem inflammatory syndrome in children during the covid-19 pandemic in Paris, France: prospective observational study

- **medRxiv**
  - Development and validation of the COVID-19 severity index (CSI): a prognostic tool for early respiratory decompensation
  - The ABO blood group locus and a chromosome 3 gene cluster associate with SARS-CoV-2 respiratory failure in an Italian-Spanish genome-wide association analysis
  - SARS-CoV-2 RNA concentrations in primary municipal sewage sludge as a leading indicator of COVID-19 outbreak dynamics

- **Annals of Internal Medicine**
  - Historical Insights on Coronavirus Disease 2019 (COVID-19), the 1918 Influenza Pandemic, and Racial Disparities: Illuminating a Path Forward
  - Prevalence of Asymptomatic SARS-CoV-2 Infection: A Narrative Review

- **Stroke**
  - SARS2-CoV-2 and Stroke in a New York Healthcare System

- **Radiology Society of North America**
  - Imaging in Neurological Disease of Hospitalized COVID-19 Patients: An Italian Multicenter Retrospective Observational Study

- **Journal of the American Academy of Dermatology**
  - Pernio-like Skin Lesions Associated with COVID-19: A Case Series of 318 Patients from 8 Countries

- **CDC Emerging Infectious Diseases**
  - SARS-CoV-2 Phylogenetic Analysis, Lazio Region, Italy, February–March 2020
  - Identifying and Interrupting Superspreading Events—Implications for Control of Severe Acute Respiratory Syndrome Coronavirus 2
  - Evaluating the Effectiveness of Social Distancing Interventions to Delay or Flatten the Epidemic Curve of Coronavirus Disease
  - Viral RNA Load in Mildly Symptomatic and Asymptomatic Children with COVID-19, Seoul

**MMWR**

- First Reported Cases of SARS-CoV-2 Infection in Companion Animals — New York, March–April 2020
- SARS-CoV-2 Infections and Serologic Responses from a Sample of U.S. Navy Service Members — USS Theodore Roosevelt, April 2020

**HOT OFF THE (LAY) PRESS**

- **The Atlantic**
  - COVID-19 Can Last for Several Months

- **The New Yorker**
  - How Iceland Beat the Coronavirus
  - How the Protests Have Changed the Pandemic
COVID-19 Digest Issue 7

- The Wall Street Journal
  - California and Some Other States See Coronavirus Cases Rise

- San Francisco Chronicle
  - Protesters and coronavirus: Bay Area health officials brace for spike in cases

- The New York Times
  - Will Protests Set Off a Second Viral Wave?
  - Where the Virus Is Growing Most: Countries With ‘Illiberal Populist’ Leaders
  - Coronavirus cases are growing faster than ever around the world, driven by emerging outbreaks in Latin America, Africa, Asia and the Middle East.
  - New daily coronavirus cases worldwide hit a record high on Sunday, the W.H.O. said, warning that the pandemic appeared to be worsening globally.
  - Coronavirus in the U.S.: Latest Map and Case Count
  - The C.D.C. Waited ‘Its Entire Existence for This Moment,’ What Went Wrong?
  - After 6 Months, Important Mysteries About Coronavirus Endure
  - Genes May Leave Some People More Vulnerable to Severe Covid-19

- The Telegraph
  - Revealed: the long-term severe effects of Covid-19 that could go on for months

- Washington Post
  - Some covid-19 patients taken off ventilators are taking days or even weeks to wake up

- NPR
  - Among the 1st to Get A Polio Vaccine, Peter Salk Says Don't Rush A COVID-19 Shot
  - Some Countries Have Brought New Cases down to Nearly Zero. How Did They Do It?
  - Local Public Health Workers Report Hostile Threats And Fears About Contact Tracing
  - Tear-Gassing Protesters During An Infectious Outbreak Called 'A Recipe For Disaster'

- The Associated Press
  - Nearly 26,000 COVID deaths in nursing homes spur inspections

EPIDEMIOLOGY UPDATES

- US Leads the World in Confirmed COVID-19 Cases per Johns Hopkins University Center for Systems Science and Engineering Dashboard Website
- California COVID-19 by the numbers are available on the CDPH Website and the NYT Map and Table (includes data by county)
- San Mateo County COVID-19 Dashboard
- Santa Clara County COVID-19 Dashboard

ADDITIONAL COVID-19 RESOURCES:

- COVID-19 California Statewide Case Statistics
- Palo Alto Online tracking the coronavirus in San Mateo and Santa Clara counties
- California Department of Corrections and Rehabilitations Population COVID-19 Tracking Dashboards
- COVID-19 Nursing Home Data