

Conclusion. Overall, the rate of SIs in patients admitted with COVID-19 is low. These patients had a long length of stay, which may be either a cause of SI or an effect. Further analysis with matched COVID-positive control patients who do not develop SIs is needed to evaluate the risk of development of SIs in relation to presenting respiratory status, COVID-related therapies, and other patient-specific factors.

Disclosures. Jason C. Gallagher, PharmD, FIDP, FCCP, FIDSA, BCPS, Astellas (Consultant, Speaker's Bureau) Merck (Consultant, Grant/Research Support, Speaker's Bureau) Qpex (Consultant) scPharmaceuticals (Consultant) Shionogi (Consultant) Jason C. Gallagher, PharmD, FIDP, FCCP, FIDSA, BCPS, Astellas (Individual(s) Involved: Self); Speakers' bureau; Merck (Individual(s) Involved: Self); Consultant, Grant/Research Support; Nabriva; Consultant; Qpex (Individual(s) Involved: Self); Consultant; Shionogi (Individual(s) Involved: Self); Consultant

297. Infectious Complications Associated with Tocilizumab Use in Patients Infected with SARS-CoV-2 at a Mid-Atlantic Hospital Consortium

Kristen R. Kent, MPhil¹; Nellie Darling, MS²; Xue Geng, MS²; Gavin Clark, n/a¹; Marybeth Kazanas, PharmD³; Princy N. Kumar, MD¹; Joseph G. Timponi, Jr., MD⁵; ¹Georgetown University School of Medicine, Washington, District of Columbia ²Georgetown University, Washington, DC; ³Georgetown University Department of Biostatistics, Bioinformatics, and Biomathematics, Washington, District of Columbia ⁴MedStar Health, Columbia, MD, Maryland; ⁵MedStar Georgetown University Hospital, Washington, District of Columbia

Session: P-14. COVID-19 Complications, Co-infections, and Clinical Outcomes

Background. The IL-6 inhibitor Tocilizumab (TOCI) has been associated with infections in 5-8% of patients with Rheumatoid Arthritis. TOCI has now been recommended as a treatment option for select patients with COVID-19; however, the risk of infection in this patient population is yet to be determined.

Methods. We performed a retrospective chart review of patients diagnosed with COVID-19 and admitted to MedStar hospitals within the D.C./Baltimore corridor from 03/01/2020 to 12/31/2020. We identified patients who had positive culture data within 30 days of administration of TOCI-based regimens and analyzed clinical characteristics and outcomes. Univariate analyses (Wilcoxon, T-test, Chi-Square, Fisher's Exact) were used to compare these outcome variables between patients who had post-treatment infections and those who did not.

Results. A total of 220 patients received TOCI-based regimens; 16% (N=36) of patients developed positive cultures within 30 days of treatment. Of the 99 cultures, 50% were gram positive (N=49), 38% were gram negative (N=38), 10% were *Candida spp.* (N=10), and 2% were anaerobic organisms (N=2). Only 9% (8/87) of the gram positive and gram negative organisms were MDROs. Bloodstream infections were the most common and accounted for 58.4% of all infections. Length of stay (LOS) was approximately twice as long in those with post-treatment infections (26 days) compared to those without infections (14 days, p<0.001). Although the mortality rate was higher in patients with infections after TOCI-based treatment compared to patients with no post-treatment infection (47% vs 31% respectively), this did not reach statistical significance (p=0.09). Moreover, there was no significant difference in the infection rate of patients treated with TOCI alone compared to TOCI and Dexamethasone (16.6% vs. 13.3%, p=0.99). No cases of invasive *Aspergillus* were observed.

Conclusion. Tocilizumab treatment in patients with COVID-19 may predispose patients to an increased risk of infection which is associated with a prolonged LOS and possibly higher mortality. We observed a two-fold increase in infections in COVID-19 patients compared to other patient groups receiving this treatment.

Disclosures. Princy N. Kumar, MD, AMGEN (Other Financial or Material Support, Honoraria) Eli Lilly (Grant/Research Support) Gilead (Grant/Research Support, Shareholder, Other Financial or Material Support, Honoraria) GSK (Grant/Research Support, Shareholder, Other Financial or Material Support, Honoraria) Merck & Co., Inc. (Grant/Research Support, Shareholder, Other Financial or Material Support, Honoraria)

298. Examining the Relationship Between Excess Weight and In-Hospital Mortality in COVID-19 Patients in Southwest Georgia, U.S.

Austin C. Dykes, n/a¹; Daniel B. Chastain, Pharm.D., BCIDP, AAHIVP²; Geren Thomas, Pharm.D., BCPS³; Henry N. Young, Ph.D.²; Andrés F. Henao Martínez, MD⁴; Carlos Franco-Paredes⁵; Sharmon P. Osae, Pharm.D., BCACP²; ¹University of Georgia, Albany, Georgia; ²University of Georgia College of Pharmacy, Albany, GA; ³John D. Archbold Memorial Hospital, Thomasville, Georgia; ⁴University of Colorado Anschutz Medical Campus, Aurora, Colorado; ⁵University of Colorado Denver, School of Medicine, Aurora, CO

Session: P-14. COVID-19 Complications, Co-infections, and Clinical Outcomes

Background. There are multiple mechanisms for the interconnection between obesity and adverse outcomes in COVID-19. Body mass index (BMI) has historically been used to delineate body fitness, but does not include age, which could influence the relationship between body fat and BMI. Ideal body weight (IBW) equations predict a single IBW, which could allow improved recognition of adults with excess weight at increased risk of death from COVID-19. The purpose of our study was to determine whether an association exists between excess weight and in-hospital mortality in COVID-19 patients.

Methods. This was a multicenter, retrospective chart review of hospitalized patients with COVID-19. Patients were separated in two groups based on the difference between actual body weight (ABW) and IBW (ABW/IBW ≤ 120% and ABW/IBW

> 120%) to compare rates of in-hospital mortality and length of stay (LOS). A subgroup analysis of patients with ABW/IBW > 120% was conducted to compare in-hospital mortality between patients with ABW/IBW 121-149%, ABW/IBW 150-199%, and ABW/IBW ≥ 200%.

Results. A total of 445 patients were included of which 71% were in the ABW/IBW > 120% group. Patients in the ABW/IBW ≤ 120% group had higher median age (71 [IQR 64-80.5] vs 60 [IQR 50-70] years) compared to those in the ABW/IBW > 120% group. Fewer African Americans and females were in the ABW/IBW ≤ 120% than in the ABW/IBW > 120% group (65% vs 86% and 35% vs 64%, respectively). There was no difference in the rate of in-hospital mortality between patients in the ABW/IBW ≤ 120% and ABW/IBW > 120% group (26% vs 20%, p=0.174). Average LOS was 10.5 days (SD 9.2) for patients in the ABW/IBW ≤ 120% and 9.3 days (SD 9.5) for those in the ABW/IBW > 120% group (p=0.227). Among those in the ABW/IBW > 120% group, in-hospital mortality was 14%, 23%, and 22% in patients with ABW/IBW 121-149%, ABW/IBW 150-199%, and ABW/IBW ≥ 200%, respectively (p=0.192).

Conclusion. In-hospital mortality and LOS were not significantly higher among COVID-19 patients with excess weight, defined by ABW/IBW > 120%, when compared to those with ABW/IBW ≤ 120%. Further research is needed to compare COVID-19 outcomes when BMI and ABW/IBW are used to define excess weight.

Disclosures. All Authors: No reported disclosures

299. D-dimer as an ICU Admission Risk Predictor in COVID-19 Patients, A Prospective Study

Oriana Narváez - Ramírez, n/a¹; Lina Morales-Cely, n/a¹; Ingrid G. Bustos-Moya, BSc¹; Yuli Diviana Fuentes-Barreiro, MD, MSc¹; Julian Lozada-Arciniegas, BSc, MSc¹; Elsa Daniela Ibañez-Prada, BSc²; Laura A. Bravo-Castelo, n/a¹; Daniela Parra-Tanoux, n/a¹; Paula Ramirez, n/a²; Salome Gomez-Duque, n/a²; Enrique Gamboa-Silva, n/a²; Edar Caceres, MD¹; Luis F. Reyes, MD, PhD³; ¹Universidad de la Sabana, Bogota, Distrito Capital de Bogota, Colombia; ²Universidad de la Sabana, Chía, Colombia, Bogota, Cundinamarca, Colombia; ³Universidad de La Sabana, Bogota, Distrito Capital de Bogota, Colombia

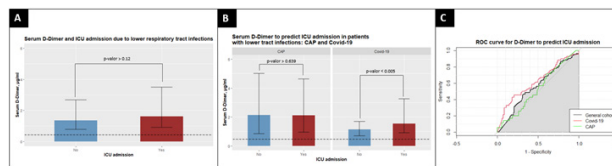
Session: P-14. COVID-19 Complications, Co-infections, and Clinical Outcomes

Background. Since the onset of the 2019 coronavirus disease 2019 (COVID-19) pandemic, the rapid increase in community-acquired pneumonia (CAP) cases has led to an excessive rate of intensive care units (ICU) admissions, a rate varying between 5-18%, depending on the country. Consequently, the study of serum biomarkers, such as D-dimer, have been utilized to identify patient with severe disease. However, further data is needed to confirm the association between this serum concentration of D-dimer and the risk of ICU admission. Thus, the aim of this study was to determine if serum concentration of D-dimer predict the risk of ICU admission in patients with COVID-19 and CAP.

Methods. A prospective observational study was carried out at the Clinica Universidad de La Sabana, Colombia. Patients older than 18 years old, hospitalized for COVID-19 or CAP were included. Then, patients were stratified into ICU and non-ICU patients. Plasma samples were collected within the first 24 hours of hospital admission to quantify D-dimer using the PATHFAST system. Concentrations were compared among groups and to assess the biomarker capacity to predict ICU admission risk, ROC curves were used. Finally, a DeLong test was applied to compare their differences.

Results. A total of 240 patients diagnosed with lower respiratory tract infection were included in the study. 88 patients were COVID-19 negative (CAP) and 152 were positive. Plasma concentrations of D-dimer (µg/ml) were significantly higher in COVID-19 patients admitted to the ICU when compared with non-ICU COVID-19 admitted patients (Median [IQR]; 1.54 [0.9-3.25] Vs. 1.13 [0.69-1.69], p=0.005). The area under curve (AUC) ROC to predict ICU admission was 0.62 among COVID-19 patients. DeLong's test p value was 0.24.

Serum D-dimer an ICU admission



Conclusion. D-dimer seems to be a promising tool to identify COVID-19 patients with disease. However, this predicting capacity was not observed in CAP patients. Further studies are needed to identify the mechanisms underlying the elevation of D-dimer in COVID-19 patients.

Disclosures. All Authors: No reported disclosures

300. Long COVID in Cancer Patients: Preponderance of Symptoms in Majority of Patients Over Long Time Period

Hiba Dagher, MD¹; Alexandre Malek, MD¹; Anne-Marie Chaftari, MD²; Ishwaria M. Subbiah, MD¹; Ying Jiang, MS³; Peter Lamie, DO¹; Bruno Granwehr, MD¹; Teny John, MD¹; Eduardo Yezpe Guevara, MD⁴; Jovan Borjan, PharmD⁵; Cielito Reyes, DRPH¹; Mary Flores, AA¹; Fared Khawaja, MBBS⁵; Mala Pande, MPH, PHD¹; Norman Ali, MD¹; Raniv Rojo, n/a¹; Daniel D. Karp, MD¹; Ray Y. Hachem, MD³; Issam I. Raad, MD²; ¹UT MD Anderson Cancer Center, Houston, Texas; ²The University of Texas MD Anderson Cancer Center, Houston, Texas; ³MD Anderson