

osmolality 328 ± 4.18 mOsm/kg, and HgA1C $12.72 \pm 1.16\%$. All 5 patients in the 2020 cohort had new-onset DM, with 4 of the 5 patients having at least 1 positive DM antibody (GAD antibodies were positive in 3, ICA/IA-2 antibodies in 2, and Zinc Transporter 8 antibodies in 1). No patients displayed COVID-19 symptoms, and only 1 patient was tested for COVID-19 by PCR, which returned negative. However, SARS-CoV2 antibody testing was not available, and it is unknown if these patients had prior COVID-19 illness. In conclusion, we noted an increased incidence of HHS at our hospital, particularly among new-onset, antibody positive DM patients during the initial months of the COVID-19 pandemic. Further study and investigation are needed to determine the cause of this increased local incidence, and if infectious, social, or economic influences related to the COVID-19 pandemic contributed. **References:** [1] Chan, K.H., et al., *Clinical characteristics and outcome in patients with combined diabetic ketoacidosis and hyperosmolar hyperglycemic state associated with COVID-19: A retrospective, hospital-based observational case series*. *Diabetes Res Clin Pract*, 2020. 166: p. 108279. [2] Unsworth, R., et al., *New-Onset Type 1 Diabetes in Children During COVID-19: Multicenter Regional Findings in the U.K.* *Diabetes Care*, 2020.

Diabetes Mellitus and Glucose Metabolism

COVID-19 AND DIABETES

A Single Virtual Consult Reduces Severe Hyperglycemia in Patients Admitted with COVID19 Infection

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Diabetes and hyperglycemia are risk factors for morbidity and mortality in hospitalized patients with COVID19. Subspecialty consultative resources to help front-line clinicians treat these conditions is often limited. We implemented a "Virtual Hyperglycemia Surveillance Service (VHSS)" to guide glucose management in COVID19 patients admitted to our 1541-bed academic medical center. From April 22 to June 9, 2020, hospitalized adult patients with COVID19 and 2 or more blood glucose (BG) values greater than 250 mg/dl over 24-h were identified using a daily BG report. The VHSS reviewed BGs and treatment plans, then made recommendations for future glycemic management via a one-time note, visible to all providers. Some patients with re-admission or persistently elevated BG after 1 week received a second VHSS note. We compared BGs from 24-h pre- and 72-h post-intervention starting at 6AM on the day following VHSS review. We also evaluated for hypoglycemia, insulin infusion use and use of formal

diabetes consults. A subgroup analysis was performed on patients in the intensive care unit (ICU). At the end of the intervention, we identified a retrospective control cohort admitted to the same hospital from March 21 to April 21, 2020 who met the inclusion criteria for a VHSS assessment. The VHSS group consisted of 100 patients with 126 individual VHSS encounters, and the control group comprised 50 patients. Baseline characteristics in the VHSS and control groups, respectively, were: mean age 62.5 vs 62.1 years, % male 58 vs 56, mean weight 91.4 vs 93.4 kg, BMI 31.8 vs 33.0 kg/m², and HbA1c 9.1 vs 8.8 %. There were fewer patients in the ICU in the VHSS than control group (44% vs 66%). In the VHSS group, mean BG pre- vs. post-intervention was 260.3 \pm 21.7 and 227.4 \pm 25.3 mg/dl (p<0.001). In the control group, mean BG pre-and post- the day they met assessment criteria was 264.8 \pm 6.5 mg/dl and 250.6 \pm 8.6 mg/dl (p=0.18). There was no difference in the use of insulin infusions or diabetes consults between the two groups. More hypoglycemia (BG<70 mg/dl) occurred in the VHSS than control group (8.3% vs 0%, p=0.04). Within the VHSS group, the average change in BG was significantly greater in ICU than non-ICU patients (-51.8 \pm 8.7 vs -19.6 \pm 5.0 mg/dl, p<0.01) and the reduction in the % of BG over 250 mg/dl was also significantly greater in the ICU (-32.2% vs -16.8%, p=0.02).

Implementation of a single virtual consult for severely hyperglycemic hospitalized COVID19 patients was associated with rapidly reduced BG concentrations, especially in the ICU. The mean reduction in BG with VHSS intervention was more than 2-fold greater than that observed in our control group. Glucose control remained suboptimal, however, suggesting the need for subsequent input from this specialty service.

Diabetes Mellitus and Glucose Metabolism

COVID-19 AND DIABETES

An Observational Study on Glycemic Outcomes, Lifestyle and Psychosocial Health of Patients With Diabetes During Covid-19 Lockdown From Bangalore

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Background and Aims: Lockdown during the COVID-19 pandemic imposed many restrictions on the public. Loss of continuum of care along with improper lifestyle was expected to worsen glycemic control in people with type 2 diabetes (T2D). We aimed to identify the effects of lockdown on their glycemic status, lifestyle changes and psychosocial health.

Methods: The pre- and post-lockdown data of 110 adults with T2D who were under regular follow up was collected by direct interview during their visit to the diabetes clinic. The variables analyzed included demographic data, HbA1c, body weight, lifestyle changes, psychosocial factors and use of technology.

Result: The overall physical activity had dipped significantly accounting to lockdown restrictions and fear.