(d=0.0). There were no overt medical decompensations. No pt reported having been unable to access medications or groceries. No pt reported significant psychological distress or feelings of isolation. None had been diagnosed with CV19. This largely geriatric T2D cohort did not report any overt deleterious effects from the LD. There were no significant differences in HbA1c non LD compared to LD. It is not possible to determine how effective the LD was in protecting these pts from CV19 other than to note that none had been diagnosed as having contracted the disease. As the 2nd wave of CV19 evolves, health care professionals will have the opportunity to study the effect of public health interventions, not only on controlling the spread of CV19, but also on the general wellbeing of different pt populations.

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Hyperglicemia at the Admission as Predictor of Severity

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Background: Diabetes Mellitus is a factor for the development of micronagiopathies, it is well known at the level of retina, renal and peripheral nervous system. However, it is important to mention that high levels of glucose have deleterious effects on the walls of the vessels, causing microangiopathic damage to the lung, consequently this leads to pulmonary dysfunction. There is local oxidative stress, increased vascular permeability, producing changes in the secretion of the mucus that leads to reduced lung volumes, lung diffusion capacity, decrease bronchodilation. Knowing this complication at the pulmonary level derived from poor control of Diabetes Mellitus, diabetic pulmonary microangiopathy represents a challenge for the COVID-19 pandemic. There is a high prevalence of diabetic patients hospitalized for COVID-19 and the complications derived from this, that is why the idea arose to carry out this review and evaluate the impact that admission glucose levels have on the clinical evolution and prognosis of these patients. Elevated serum glucose levels have deleterious effects on the walls of blood vessels, leading to microangiopathy. Such a destructive process also involves the pulmonary circulation, where it is known as diabetic pulmonary microangiopathy. This hypothesis has been confirmed in histopathological examinations of the lung parenchyma, as well as in lung function tests. However, until now there have been no clinical implications of these findings.[1] Histopathological evidence of pulmonary involvement in subjects with diabetes mellitus has included thickened pulmonary capillary basal plates and alveolar epithelial plates, the latter suggesting existing pulmonary microangiopathy. Abnormal lung function has been detected in some diabetic patients. Glycosylation-induced non-enzymatic alteration of lung connective tissue is the most likely pathogenetic mechanism underlying mechanical lung dysfunction in diabetic subjects. while the most sustainable explanation for altered pulmonary microangiopathy.[2] **Metodos:** This short review looks at the main findings, prospective cross-sectional analytical study, in Guatemala Central America that included 319 patients with COVID 19, hospitalized with comorbidities like type 2 Diabetes Mellitus, hypertension and chronic kidney disease as medical history. These patients did not have a history of pulmonary pathology and who required a low- and high-flow oxygen device since admission, presenting moderate and severe COVID-19. These laboratories were carried out in the first chemistry performed after the onset of respiratory symptoms in the arrival at the hospital. Chi square was used for categorical variables and t student for numeric variables for the rest of the variables. **Results:** The study showed that in the severe group of patients the median age was 52 years old and in the moderate group it was 51. In the severe group of patients, a male gender predominance with 50.7% and 49.3% in moderate; showing the female sex 46% and 53% respectively. Regarding glucose levels at admission, there was a mean of 189mg / dl for severe patients and 156 mg / dl in moderate patients, with a P: 0.021. **Conclusion:** The primary point in this study is to see how the correlation was measured since they had to be two numerical variables for it to be correlation. In this case, blood glucose and vascular damage, the most severe cases were related to blood glucose levels greater than 125 mg/dl. In our study, we conclude that the presence of glycemic levels below 125 mg/dl is a protective factor with respect to mortality with an OR 0.521 (CL 0.324–0.835, Po.007). That means, that those patients who are admitted with glycemic levels greater than 126 mg/d have twice the risk to die at 28 days of admission than those who do not have levels greater than 125mg/dl. In the same way, those patients who were admitted with less than 95% saturation were compared and there was no significant difference OR 1.174 (0.492–2.806, p0.822). 1. Kuziemski, Krzysztof Specjalski et a. lEndokrynol Pol. 2011; 62 (2): 171–6. Microangiopatía pulmonar diabética: ¿realidad o ficción? Publicated: Ewa Jassem. https://pubmed.ncbi.nlm.nih.gov/31637580/ 2. Krzysztof Kuziemski et al ¿Es el pulmón un "órgano diana" en la diabetes mellitus? Publicated: 2196023 https://pubmed.ncbi.nlm.nih.gov/19722145/

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Hyperglycemia Is Associated With Increased Mortality in Critically Ill Patients With COVID-19

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Objective: To explore the relationship between diabetes mellitus (DM), hyperglycemia, and adverse outcomes in critically ill patients with coronavirus disease 2019 (COVID-19). **Research Design and Methods:** The study population comprised 133 patients with COVID-19 admitted to an intensive care unit (ICU) at an academic, urban, quaternary-care center between March 10th and April 8th, 2020. Patients were categorized based on the presence of DM and early-onset hyperglycemia (EHG), defined as a blood glucose >180 mg/dL during the first two days of ICU admission. The primary outcome was 14-day in-hospital mortality; also examined were 60-day in-hospital mortality and the levels of C-reactive protein (CRP), interleukin 6, procalcitonin, and lactate. **Results:** Compared to non-DM patients without EHG, non-DM patients with EHG exhibited higher adjusted hazard ratios (HR) for in-hospital mortality at 14 days (HR 5.76, p=0.008) and 60 days (HR 7.28, p=0.004). Non-DM patients with EHG also featured higher levels of mean CRP (322.3±177.7 mg/L, p=0.036), procalcitonin (34.75±69.33 ng/mL, p=0.028), and lactate (2.7±2.1 mmol/L, p=0.023). **Conclusions:** In patients with critical illness from COVID-19, those without DM with EHG were at greatest risk of 14-day and 60-day in-hospital mortality. The limitations of our study include its retrospective design, and relatively small cohort. However, our results raise the possibility that the combination of elevated glucose and lactate may identify a specific cohort of individuals at high mortality risk from COVID-19, and suggest that glucose testing and control are important in individuals with COVID-19, even in those without pre-existing diabetes.

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Impact of COVID 19 National Lockdown on Glycaemic Control in Children and Adolescents With Type 1 Diabetes (T1DM): A Retrospective Review at a Large UK Teaching Hospital

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Introduction: The coronavirus disease global pandemic led to national lockdown in the United Kingdom on 23rd March 2020. We compared the glycaemic control of children and adolescents with Type 1 diabetes (T1DM) at Doncaster & Bassetlaw Teaching Hospitals in the 12 weeks prior to the lockdown, to the 12 weeks following lockdown. **Methods:** HbA1c result 3 months following lockdown was compared to the last HbA1C prior to lockdown. Data from Continuous Glucose Monitors (CGMs), Flash Glucose Systems (FGS) and those performing Self-Monitoring of Blood Glucose (SMBG) were compared alongside changes to patient contact that occurred. **Results:** In 264 patients under 20 years of age across both hospitals in the Trust, face-to-face consultations decreased (245 vs 151, 39%), and remote consultations increased (1751 vs 2269, 30%) (χ^2 p<0.001). Excluding those within a year of diagnosis, 122 had paired HbA1c results, and 80 had more than 70% of glucose monitoring data available. HbA1c levels decreased (67.4 mmol/mol vs 61.3 mmol/mol, p<0.001) and glucose monitoring data showed lower mean glucose after lockdown (9.7mmol/L vs 9.5mmol/L, *p*=0.034) with lower standard deviation (4.4mmol/L vs 4.2mmol/L, *p*<0.001). Proportion of time in range (3.9mmol/L to 10mmol/L) increased (n=47, 55.2% vs 58.0%, p=0.017), with no change to time below range (4.8% vs 5.0%, *p*=0.495). **Conclusion:** Glycaemic control improved in the 12 weeks following national lockdown. This demonstrates the difficulties faced by patients and carers managing T1DM around school pressures, meals away from home, social life and peer pressure. Increased remote contact with patients with T1DM has not been detrimental to glycaemic control.

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Impact of Covid-19 Lockdown Measures on Lifestyle Behavior in Children and Adolescents With Severe Obesity

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Introduction: During the COVID-19 pandemic, lockdown measures were implemented with large impact on lifestyle behaviors and well-being of children (including adolescents). The impact on children with severe obesity, who plausibly are at even larger risk, has not yet been described. Aim of this study was to investigate the impact of COVID-19 lockdown on eating behaviors, physical activity, screen time and quality of life (QoL) of children with severe obesity. **Methods:** In this mixed-methods study, questionnaires and semi-structured telephone interviews were used to investigate impact of COVID-19 during the first wave in the Netherlands (April 2020) on children with severe obesity (adult BMI-equivalent ≥35kg/m^2) treated at our obesity center. The Dutch Eating Behavior Questionnaire - Child, Pediatric Quality of Life Inventory, and Dutch Physical Activity Questionnaire were filled out by their families pre-pandemic and during lockdown. Changes over time in percentile scores, weekly physical activity and screen time were assessed. Qualitative analyses were performed according to the Grounded Theory. **Results:** We included 83 families, of which 75 participated in the interviews. Their children's characteristics were mean age 11.5 years (SD 4.6), 52% female, mean BMI SD score 3.8 (SD 1.0), indicating severe obesity. On group level, no changes in scores for emotional, restrained, external eating, and QoL nor in screen time were observed (Δ scores +9.2, +3.9, +0.3; and +3.0, respectively; -0.3 hr/wk; all p>0.05). Weekly