"A Pilot study: Impact of COVID-19 recovery on HbA1C."

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INTRODUCTION

• Coronavirus disease 2019 (COVID-19) infection is confirmed to worsen type 2 diabetes (DM2) control by significantly increasing HbA1c.
• Impact of recovery from acute COVID 19 on HbA1c is not clear to the medical society.

OBJECTIVE

• To determine impact of recovery of acute COVID 19 on HbA1c post discharge in outpatient follow up.

HYPOTHESIS

• People with DM2 with high A1C during acute COVID requiring high doses of insulin, may have decreased insulin requirement with adequate glycemic control after recovery from acute COVID.

METHODS

Patient selection:
• A retrospective chart review
• Patients with Type 2 Diabetes Mellitus and Acute COVID 19 infection during March 2020- June 2020.
• HbA1C levels were checked every 3 months during follow up visits at our outpatient Adult Health Clinic after being discharged from our hospital until one year
• A total of 17 charts were analyzed.

CONCLUSIONS

• Our study has demonstrated the significant and rapid decrease of HbA1c, as well as insulin requirement after recovery from COVID infections.

RESULTS

• The paired T-test for A1C between hospitalization and the first follow-up visit is performed.
• The Mean of HbA1C before discharge and the first follow-up visit are 11.95 and 7.79
• The mean difference (decrease) in A1C is 4.17. (p<0.01)
• Out of 14 patients who required insulin on discharge, 8 patients were discontinued of insulin within the first year since COVID-19.
• Out of the 8 patients discontinued off insulin, 50% of them were off in first month of discharge, 25% were off in 3 months, 13% were off in 9 months and 12 months follow up.

RECOMMENDATIONS

• To follow up with those COVID19 patients discharged with insulin more frequently, every 2-4 weeks to check the logs and promptly adjust insulin dose and other antihyperglycemic medications to prevent life-threatening hypoglycemic events.
• To continue future research in this topic to completely understand the course of recovery and long term impact of COVID19 on DM2.

REFERENCES