

Glucagon-like peptide 1 receptor agonists: inpatient use during the COVID-19 pandemic

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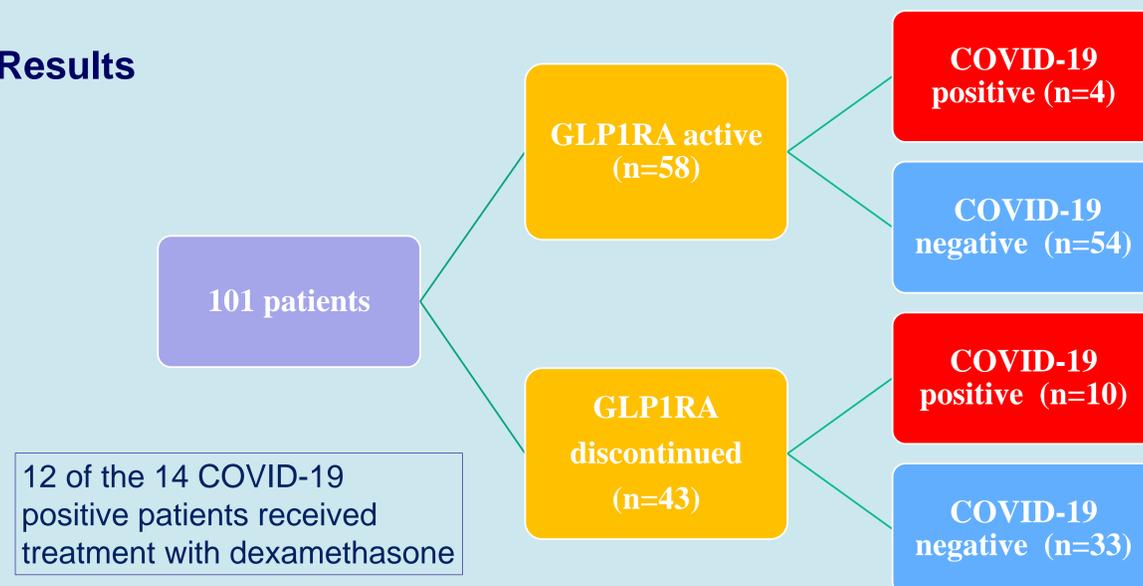
Background

Glucagon-like peptide 1 receptor agonists (GLP1RAs) are increasingly used in the management of type 2 diabetes. There is uncertainty surrounding their use during acute hospitalisation, and few data for inpatient outcomes - especially during COVID-19 infection. The treatment of COVID-19 infection frequently involves treatment with high dose steroids which has presented challenges in the management of patients with diabetes.

Methods

Electronic records of all patients using GLP1RAs at the point of hospital admission during the COVID-19 second-wave (1st November 2020 to 31st January 2021) were obtained. Data were collected for COVID-19 status, inpatient glycaemic control, continuation of GLP1RA, or reason(s) for discontinuation. Glycaemic control was determined by number of 'Good Diabetes Days' (GDD), defined as days with no values <4mmol/L and ≤1 value >11mmol/L, and ≥2 tests/day.

Results



Proportion of 'Good Diabetes Days'

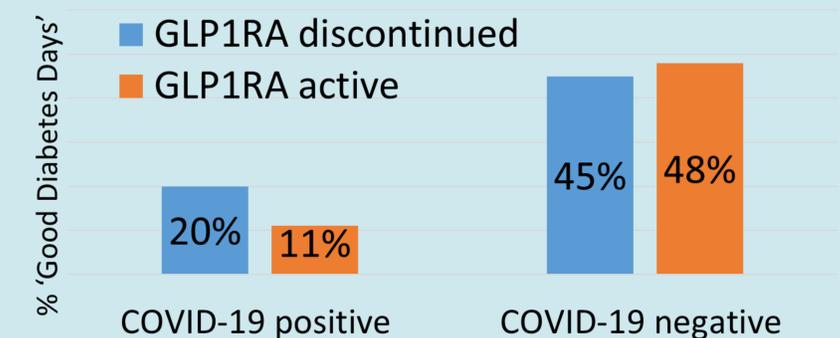
GLP1RA active (58 patients) 46% (128 of 279 days)

GLP1RA discontinued (43 patients) 35% (89 of 251 days)

Proportion of 'Good Diabetes Days'

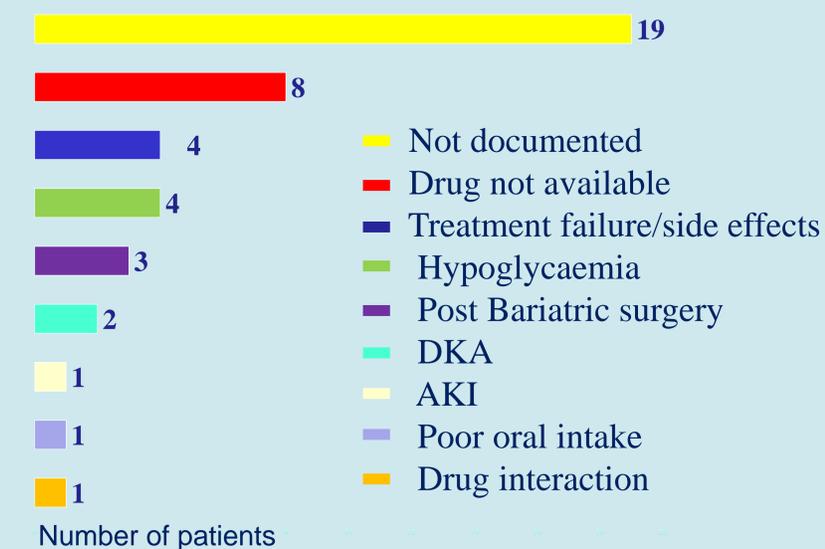
COVID negative (87 patients) 47% (196 of 417 days)

COVID positive (14 patients) 19% (21 of 113 days)



Discontinuation of GLP1RAs

Reasons for GLP1RA discontinuation



- Overall 43% of patients had GLP1RA discontinued on admission.
- In those with COVID-19 infection, GLP1RAs were discontinued in 71% versus 38% without COVID-19

Conclusion

Discontinuation of treatment with GLP1RAs on admission to hospital was common. In COVID-19 positive patients, this may be due to reduced efficacy in the context of treatment with high-dose steroids. No difference in glycaemic outcomes was seen in patient negative for COVID-19 infection.