

# Impact of COVID-19 Pandemic on Endoscopy Access of Symptomatic Upper Gastrointestinal Bleeds

O. Fagan<sup>1</sup>, N. Corcoran<sup>1</sup>, R. Hurley-O'Dwyer<sup>1</sup>, K. Van Der Mewre<sup>2</sup>, P. Armstrong<sup>2</sup>, D. Crosnoi<sup>2</sup>, V. Parihar<sup>2</sup>, C. Steele<sup>2</sup>, J. Miranda<sup>1</sup>



1. Dept of Medicine, Letterkenny University Hospital, Donegal

2. Dept of Gastroenterology, Letterkenny University Hospital, Donegal

## INTRODUCTION

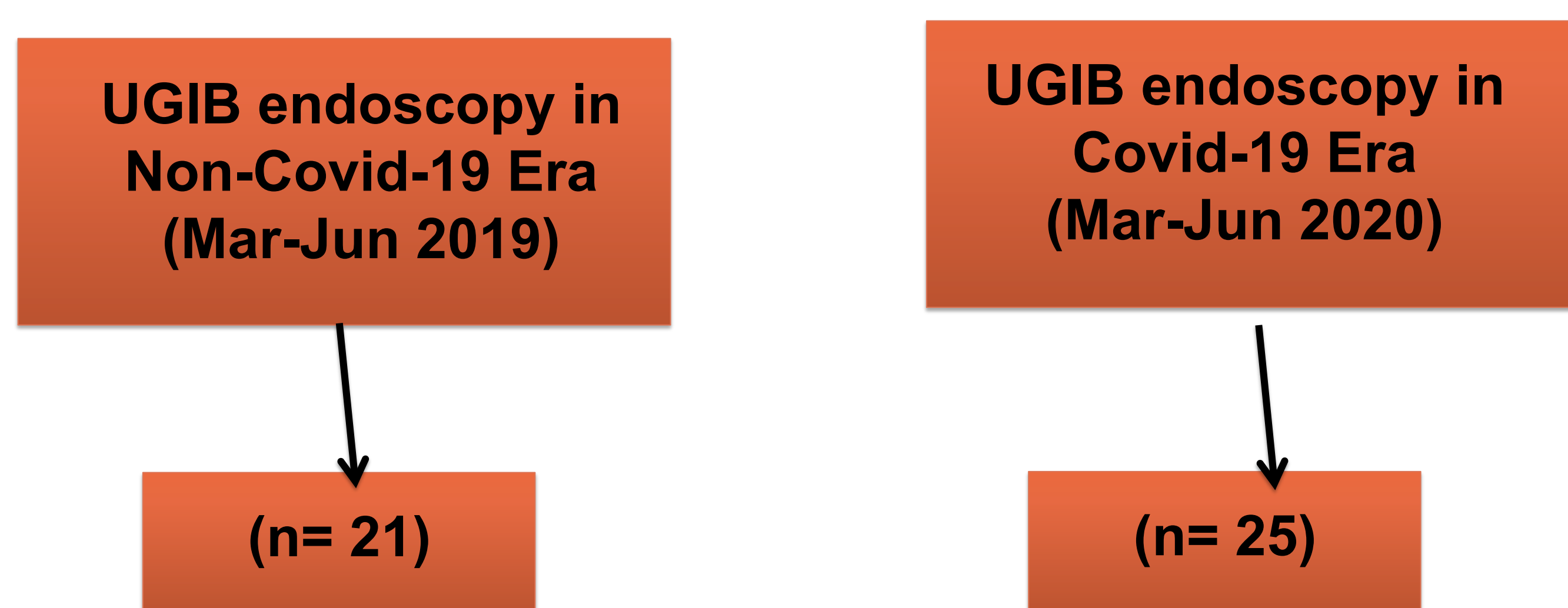
The COVID-19 pandemic has greatly impacted endoscopy services globally<sup>1</sup>. Upper gastrointestinal (GI) bleeding, a significant cause of mortality, is a common reason for hospital admission. Guidelines recommend early upper GI endoscopy<sup>2, 3</sup>.

## AIM

- To compare time-to-endoscopy in admissions with upper gastrointestinal bleeds (UGIB) during COVID restrictions (March-June 2020) with those in Pre-COVID- times (March-June 2019).
- To assess outcomes in patients admitted with UGIB in non-covid-19 and covid-19 times.

## METHODS/STUDY DESIGN

Retrospective HIPE coding from an academic teaching hospital over 3 month periods (Mar-Jun) in 2019 and 2020 were performed respectively. All patients admitted with codes hematemesis, UGIB etc. were included, with data obtained from their electronic health records.



## RESULTS

Admissions with UGIB March-June 2019 were compared with those of March-June 2020: 21 patients (12-female) underwent gastroscopy in first arm compared to 25 patients (12-female) in the second arm. Average time to endoscopy during March-June 2020 (COVID-19 pandemic restrictions) was improved at 19.9 h versus 45.57 h during March-June 2019 (p-value 0.003). Average GBS score at 6.9 was higher but not significant in admissions during COVID restrictions compared with 4.9 in admissions pre-COVID (p-value 0.31).

All patients with GBS score <2 had outpatient upper gastrointestinal endoscopy performed.

The covid-19 pandemic restrictions did not affect access to endoscopy, in fact this was improved. Reduced outpatient endoscopy could explain this. The institution in question was re-zoned into covid and non-covid zones; this zoning facilitated rapid investigation, treatment and management of UGIB.

	Non-covid-19 (n=21)	Covid-19 (n= 25)	P-value
<b>Baseline and disease-related characteristics</b>			
Age at endoscopy (y), median (IQR)	72 (44-80)	70 (61-78)	0.32
Sex, n (%)			0.54
Men	12 (57.1)	12 (48.0)	
Women	9 (42.8)	13 (52.0)	
Exposure to medications n (%)			
DOAC	5 (23.8)	1 (4.0)	<0.05*
Warfarin	1 (4.8)	1 (4.0)	0.90
LMWH (Therapeutic anticoagulation)	0 (0)	0 (0)	1
Aspirin	2 (9.5)	5 (20.0)	0.34
DAPT	1 (4.8)	2 (8.0)	0.67
Relevant co-morbidities n (%)			
Cirrhosis	1 (4.8)	3 (12.0)	0.37
Cirrhosis + portal hypertension	1 (4.8)	2 (8.0)	0.64
Alcohol excess	3 (14.3)	5 (20.0)	0.58
GAVE	1 (4.8)	3 (12.0)	0.37
<b>Glasgow Blatchford Score</b>	4.93	6.94	0.29
<b>Endoscopy details n (%)</b>			
OGD performed,	7 (33.3)	8 (32.0)	0.93
Therapeutic OGD performed	2 (9.5)	5 (20.0)	0.36
OGD not performed	14 (66.6)	17 (68.0)	
Average time to endoscopy (hr), median	45.57	19.9	<0.05*
<b>Therapeutic intervention</b>			
Documented transfusion n (%)	8 (38.0)	6 (24.0)	0.81
Endoscopic intervention n (%)			
Variceal banding	0	1	
Clipping	1 (4.8)	2 (8.0)	
APC	1 (4.8)	2 (8.0)	
Length of stay (d), average (sd)	5.43	4.62	0.38

**Table 1: Baseline characteristic and endoscopy data**

## CONCLUSION

- Our study reveals no negative impact of COVID-19 pandemic on access to endoscopy in upper GI bleed settings; rather, we demonstrated improved times.

## References

- Rutter MD, et al. Gut 2020;0:1-7. Impact of the COVID-19 pandemic on UK endoscopic activity and cancer detection: a National Endoscopy Database Analysis doi: 10.1136/gutjnl-2020-322179.
- Gralnek IM, et al. European society of gastrointestinal endoscopy (ESGE) (2015) Diagnosis and management of nonvariceal upper gastrointestinal haemorrhage. www.esge.com.
- NICE (2012, updated August 2016) Acute upper gastrointestinal bleeding in over 16s. CG141