

The use of a COVID-minimised pathway to restart outpatient endoscopy during Covid-19 pandemic – Is it safe for patients and staff?

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Main findings

- Pre-endoscopy 0/301 asymptomatic patients tested positive for SARS-CoV-2 on nasopharyngeal swab.
- No cases of Covid-19 were detected after endoscopy in patients or staff

Introduction

COVID-19 has had a significant impact worldwide on GI endoscopy with a substantial reduction in the delivery of service initially dropping down to 12% pre-pandemic levels in the UK. During the deceleration and early recovery phase of the pandemic there was a need to restart endoscopy service while keeping patients and staff safe. The British Society of Gastroenterology (BSG) published guidance based on consensus opinion and limited data available and proposed a 'Covid-minimised' endoscopy pathway.¹ This included stratification of diagnostic procedures according to aerosol generation, assessment of infection risk and guidance on the use of personal protective equipment (PPE).

Aims

We sought to evaluate the risk of COVID-19 transmission after endoscopy using a 'COVID-minimised' pathway.

Methods

The BSG guidelines were implemented in Oxford in May 2019. Oxford is a large tertiary referral centre which, prior to Covid-19, performed approximately 20,000 annual procedures. There is 946 beds across the Trust with a catchment population of 655,000. Three endoscopy units were designated 'COVID-minimised' sites and one large endoscopy unit was designated a 'hot' location. All patients underwent telephone screening with SCOTS criteria comprising of questions about symptoms, infectious contacts and shielding status. Patients had nasopharyngeal swabbing 48-72 hours prior to their endoscopy procedure. Lower GI endoscopy was performed on patients with negative swabs with level 1 PPE and all upper GI endoscopy was performed in level 2 PPE. All patients were followed up at 7 and 14 days to check for symptoms. All data from consecutive patients was entered prospectively into an anonymised database.

Results

363 patients underwent pre-screening with SCOTS criteria between 30 April and 30 June 2020 and 334 patients underwent endoscopy in a 'COVID-minimised' site. Reasons why patients did not enter the 'COVID-minimised pathway' included: patient refusal (n=9), unable to contact patient (n=5), cancellation because patient didn't isolate after nasopharyngeal swab test (n=3), patient cancellation (n=5) and rebooking to 'hot site' because patient unable to get swabbed/shielded after swabbing (n=7). The mean±SD age was 57.4±16.3 and 50.1% were male. Figure 2 shows the breakdown of procedure performed. 82.6% (n=275) underwent a lower GI endoscopy, 14.9% (n=50) underwent an upper GI endoscopy and 2.4% (n=8) had a combined procedure. The majority 60% (n=200) were urgent procedures or '2-week-wait' suspected cancer referrals. 15.2% (n=51) were in the 'shielding' or 'cocooning' category.

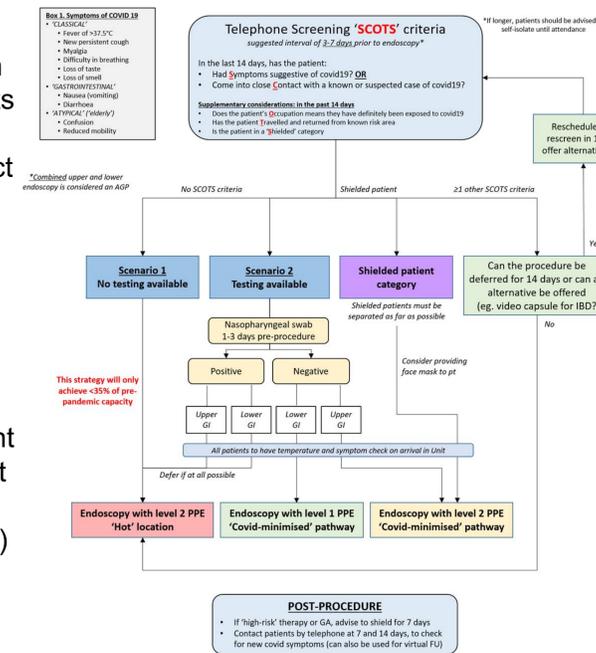


Figure 1. BSG 'Screen and Scope' algorithm with SCOTS criteria

Results

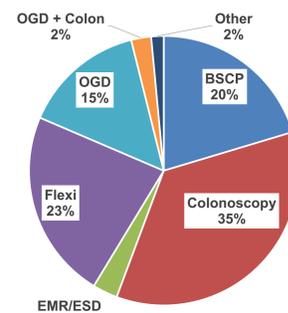


Figure 2. Procedures performed. BSCP, Bowel Cancer Screening Programme; EMR/ESD, endoscopic mucosal resection/endoscopic submucosal dissection

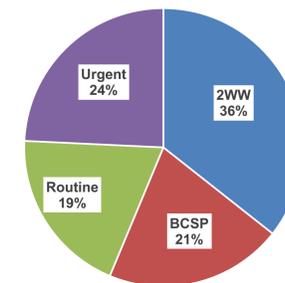


Figure 3. Urgency of endoscopy referrals. 2WW, 2-week-wait (UK suspected cancer pathway); BSCP, Bowel Cancer Screening Programme.

Pre-procedure nasopharyngeal swab testing for SARS-CoV-2 was performed in 301 patients and all patients were negative. Only one patient had symptoms compatible with Covid-19 at either the 7-day or 14-day follow up phone call. This patient had a subsequent negative Covid-19 swab and her symptoms settled. No cases of COVID-19 were detected post endoscopy in any patient or staff during this study.

Results

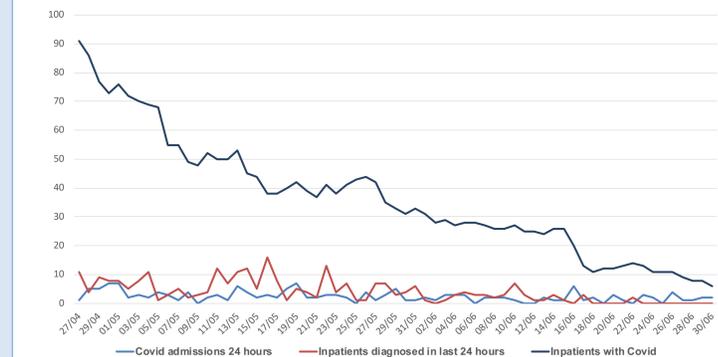


Figure 4. Covid-19 patient burden in Oxford University Foundation Trust during study period.

Conclusion

A COVID-minimised pathway using screening questionnaires, pre-procedure swabbing and appropriate PPE is safe for both patients and staff in the deceleration/recovery phases of the Covid-19 pandemic. This data was included in a large nationwide multicentre study of 6208 patients involving 18 UK tertiary and local centres and no Covid-19 cases were detected in any centre after endoscopy in patients or staff.²

References

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2. Hayee B, East J, *et al.* Multicentre prospective study of COVID-19 transmission following outpatient GI endoscopy in the UK. *Gut* Published Online First: 14 September 2020. doi: 10.1136/gutjnl-2020-322730

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The authors declare no conflicts of interest
The authors would like to thank all the administration, endoscopy triage staff and Bowel Cancer Screening nurses in Oxford University Foundation Trust who assisted in the implementation of the pathway and gathering of this data.