Improving Barrett's Diagnosis and Surveillance Service at a District General Hospital in the United Kingdom

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Introduction

Barrett's oesophagus is a well identified precursor for oesophageal adenocarcinoma. It is estimated that the lifetime risk of progression from Barrett's to oesophageal adenocarcinoma is approximately 1%, with a risk of 0.12-0.5% annually (Kumar, Clark, Zammitt and O'Brien, 2018). It is therefore crucial that diagnosis and surveillance standards meet national guidelines.

The British Society of Gastroenterology recommends that biopsies are carried out using the Seattle protocol and segment lengths reported using the Prague criteria. Interval of endoscopies is determined by the length of the Barrett's segment. Segments less than 3cm or in those with intestinal metaplasia, a repeat gastroscopy is recommended every 3-5 years. In patients with a segment greater than or equal to 3cm, it is recommended that a surveillance gastroscopy is done every 2-3 years (Fitzgerald et al., 2013). When dysplasia was identified on histopathology, patients from our hospital were referred to a tertiary specialist centre for ongoing management.

This audit was carried out to assess if our District General Hospital was meeting the standards set by the British Society of Gastroenterology with regards to Barrett's diagnosis and surveillance.

Methods and Materials

Data was collected looking at 143 OGDs carried out for Barrett's diagnosis and surveillance at a District General Hospital in the United Kingdom from 01/01/2018 to 30/06/2018. The OGD reports were compared against recommended national standards set by the British Society of Gastroenterology.

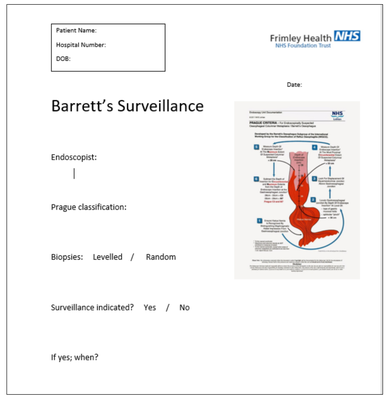
A proforma was created and was put into use from September 2020. It was utilized by all endoscopists when carrying out OGDs for Barrett's diagnosis and surveillance. The proforma was added to the end of the hospital's standard endoscopy report.

Following the intervention and use of the proforma, the second cycle of the audit was carried out looking at 58 OGDs completed between 05/08/2020-27/02/2021 to see if they met the standards set out by the British Society of Gastroenterology. The Barrett's surveillance service and the volume of OGDs carried out following the introduction of the proforma was affected by the Covid-19 pandemic.

Results

The first cycle of the audit found that only 34% of OGDs had a Prague classification documented correctly. 0% of OGDs had the correct biopsy protocol followed and 12.6% of endoscopies did not have any biopsies taken. 26% of patients had no follow up or surveillance endoscopy interval documented or organised.

Following the intervention, it was found that 96% of endoscopies now had a Prague classification documented, an increase of 62%. There was a 65% increase in correct biopsy technique being followed and 100% of OGD reports now had surveillance interval documented if deemed appropriate.


Patient Name:
Hospital Number:
DOB:

Frimley Health NHS Foundation Trust

Date:

Barrett's Surveillance

Endoscopist:

Prague classification:

Biopsies: Levelled / Random

Surveillance indicated? Yes / No

If yes; when?

Figure 1. Proforma introduced

Discussion

The audit clearly displays that following our intervention there was a significant improvement in the quality of Barrett's diagnostic and surveillance endoscopies, when compared to national guidelines. Given its potential for malignant transformation, correct surveillance is exceptionally important to improve patient care and reduce mortality. The introduction of a proforma drastically improved the standard of the service provided at our District General Hospital and is one that can be transferable to other hospitals.

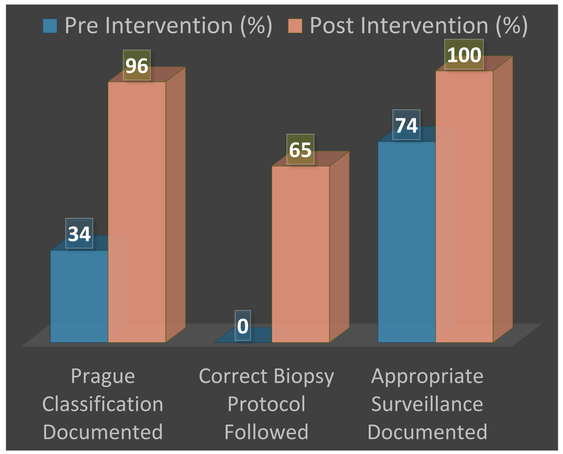


Chart 1. Results of intervention

Contact

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References

Fitzgerald, R., di Pietro, M., Ragunath, K., Ang, Y., Kang, J., Watson, P., Trudgill, N., Patel, P., Kaye, P., Sanders, S., O'Donovan, M., Bird-Lieberman, E., Bhandari, P., Jankowski, J., Attwood, S., Parsons, S., Loft, D., Lagergren, J., Moayyedi, P., Lyratzopoulos, G. and de Caestecker, J., 2013. British Society of Gastroenterology guidelines on the diagnosis and management of Barrett's oesophagus. *Gut*, 63(1), pp.7-42.

Kumar, P., Clark, M., Zammitt, N. and O'Brien, A., 2018. *Essentials of Kumar & Clark's clinical medicine*. 6th ed. [S.l.]: Elsevier.