Variation in the investigation and diagnosis of Eosinophilic Oesophagitis in daily clinical practice

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INTRODUCTION

- Eosinophilic Oesophagitis is a recognised cause of dysphagia, with an estimated annual incidence of 6–13 cases/100,000 persons.
- Endoscopic features may be subtle or absent and as such societal guidelines advocate the acquisition of six non-targeted oesophageal biopsies, where a cause has not been identified.
- We aim to determine whether these recommendations are adhered to in clinical practice.

METHODS

- We performed a database review of all diagnostic OGDS performed to investigate dysphagia or food bolus obstruction, during the 12 month period between 1st July 2016-30th June 2017.
- This search was performed within three large teaching hospitals (Cambridge University Hospital, Sheffield Teaching Hospitals and Nottingham University Hospital).
- Endoscopy reports were reviewed to determine endoscopic findings.
- Histology reports were examined to establish the number of biopsy samples received and whether a diagnosis of Eosinophilic oesophagitis was made.

RESULTS

- During this time period a total of 25,495 OGDS were performed, of which 4056 (16%) were carried out as part of the investigation of dysphagia.
- Failed and repeat procedures were excluded leaving a total study population of 3712.
- An endoscopic diagnosis potentially causing dysphagia was observed in 1286 patients; oesophagitis/ulceration 583 (15.7%), benign stricture 311 (8.4%), malignancy 188 (5.1%) and other miscellaneous causes 156 (4.2%).
- In the remaining 2468 patients (66.5%) an endoscopic cause of dysphagia was not identified.
- Biopsies to exclude Eosinophilic Oesophagitis were taken during 923 (37.4%) of these non-diagnostic procedures.
- A reason for not taking biopsies was documented in 19 cases.
- The recommended 6 biopsies were received by histopathology in 87 patients.
- A diagnosis of Eosinophilic Oesophagitis was considered in 42 patients based on endoscopic features, of which 68% went on to be confirmed with histology.

CONCLUSIONS

- During the 12 month period a total of 83 histologically confirmed cases of Eosinophilic Oesophagitis were diagnosed.
- Endoscopy had a sensitivity and specificity for the diagnosis of Eosinophilic oesophagitis of 33.7% and 96.8% respectively.
- Physician endoscopists were more likely take biopsies, acquiring these in 46.4% of procedures where this would be appropriate, compared to surgical endoscopists who took these in 13.3%.
- Physicians consequently diagnosed 77 (93%) of confirmed cases.

This study demonstrates variable adherence to recommendations for the investigation of Eosinophilic Oesophagitis. The hospitals included serve a combined population of approximately 3.2 million, giving rise to a below expected incidence of 2.6 cases per 100,000 per year.