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Disclosure of Interest None Declared.

PTU-032 | **TWO WEEK RULE REFERRALS FOR UPPER GI CANCER: RIGHT PATIENTS, WRONG TEST?**

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Introduction Patients with alarm symptoms for upper gastrointestinal (GI) cancer or those over 55 years with persistent, recent onset dyspepsia are referred for a specialist opinion under the two week rule (TWR) referral pathway. Referrals are vetted by two consultants, and in the majority of cases patients are sent directly for upper GI endoscopy (OGD). The incidence of gastric cancer in patients undergoing TWR endoscopy is around 4%.[1] Alarm symptoms have very variable specificity and sensitivity for upper GI cancer.[2] This study aimed to analyse outcomes for both patients triaged direct to OGD and direct to clinic.

Methods A prospective analysis of patients referred to a single centre in South London (St George's Hospital) under the TWR pathway for upper gastrointestinal cancer was performed. Patients referred during two random four week periods in 2012 were identified. The referral form, endoscopy records, clinic letters, radiology reports and histology results were reviewed.

Results Data were analysed for 114 patients. Mean age was 63 years, with 23% of referrals aged under 55 years.

96 (84%) patients went direct to OGD, of which 3 (3%) had upper GI cancer and 4(4%) had significant non-malignant pathology. In the 27 (28%) patients under 55, no significant pathology was identified at OGD. Dyspepsia, dysphagia and weight loss were the commonest indications for the referrals.

47 (49%) patients had further imaging after endoscopy of which 18 (38%) had significant pathology leading to a change in management.

18 (16%) were seen directly in clinic following referral of which 11 (61%) went on to have further imaging. Of these patients, 45% had malignancy and 35% had significant abnormalities leading to a change in management.

Conclusion The yield of pathology at OGD undertaken as a first line investigation in patients referred via the TWR pathway is low, regardless of the referral criteria. However, imaging modalities appear to have a reasonably high yield of pathology in this group of patients. This suggests that General Practitioners are identifying the correct group of patients for referral, but that perhaps OGD is not the most appropriate first line test. Clinical review, as a first point of contact of patients referred via the TWR pathway, is likely to facilitate a more guided investigation process, while reducing the number of endoscopies being undertaken, and has potential cost-saving implications.

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Disclosure of Interest None Declared.

PTU-033 | **THE UTILITY OF NARROW BAND IMAGING ENDOSCOPY IN IDENTIFYING POTENTIAL CAUSES OF IRON DEFICIENCY ANAEMIA IN THE ABSENCE OF ANY OVERT GI CAUSE**

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Introduction IDA is prevalent in up to 5% of the developed world and endoscopy remains the most utilised investigation. Magnified white light endoscopy has been shown to accurately identify gastric atrophy, H. pylori gastritis and coeliac disease but the role of magnified NBI endoscopy (NBI-Z) in this context has not been evaluated. The study aim was to assess the ability of NBI-Z to make a real time diagnosis of these conditions compared to histology as the gold standard.

Methods This prospective cohort study recruited patients undergoing endoscopic evaluation for IDA. All procedures were performed with an Olympus video endoscopy system by clinicians with advanced imaging experience. Systematic NBI-Z imaging in parts of the duodenum and gastric mucosa were taken with corresponding biopsies. A previously validated Nottingham Type 1–4 classification system was used to classify the characteristic gastric mucosal pit pattern, and magnified morphological features were used to describe intestinal metaplasia and villous atrophy. This allowed for a real time diagnosis to be made for villous atrophy, gastric atrophy and H. pylori gastritis. The specimens were examined by a single blinded GI pathologist.

Results 105 patients were recruited over 3 years. Excluding those with an obvious cause (n = 11), a total of 94 patients were included in the final analysis. Female: male ratio was 1: 0.7, median age 66 years (range 21–85). 38% had significant co-morbidities. At time of endoscopy 52% were taking iron therapy, 19% aspirin, 30% PPI and 4% NSAIDs. The median (range) anaemia parameters were: Hb 10.8g/dL (7.7–12.6), MCV 82fl (60–97), Ferritin 10g/L (1–379) and iron 7.5 µmol/L (1–22). 73% had the procedure under sedation with median doses of 2.5 mg midazolam and 25 mg pethidine.

Conclusion In patients with IDA, NBI-Z is highly specific in providing a real time diagnosis of gastric atrophy and coeliac disease.

Abstract PTU-033 Table 1 NBI performance (%) compared to histology with 95% confidence intervals

	Sensitivity	Specificity	Positive predictive value	Negative predictive value
Type 1 predicting normal	100 (81.4–100)	24.2 (18.8–24.2)	27.7 (22.5–27.7)	100 (77.7–100)
Type 2/3 predicting H. pylori gastritis	100 (76.9–100)	28.8 (22.6–28.8)	27.5 (21.1–27.5)	100 (78.4–100)
Type 4 predicting atrophy	92.9 (72.7–99)	93.3 (72.7–99.4)	92.9 (72.7–99.4)	93.3 (74.5–94.4)
Predicting Intestinal Metaplasia	50 (15.8–65.8)	98.1 (94.4–99.9)	75 (23.7–98.7)	94.6 (91–96.3)
Predicting Villous Atrophy	66.7 (13.6–97)	98.7 (96.6–97)	66.7 (13.6–97)	98.7 (96.6–99.9)