findings. This study suggests that, where biopsy site details were provided, only 7.2% of patients were adequately biopsied. Remaining cases should have repeat biopsies to decide on surveillance. "Extensive metaplasia" refers to a wide intragastric distribution of IM to include the antrum and corpus. We identified discrepant use of nomenclature in pathology reporting in 15.4%. *Helicobacter pylori* was associated in 11.4%, where ESGE advocates its eradication. This study reveals further work is needed to risk stratify and survey this important pre-cancerous condition.

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Disclosure of Interest None Declared.

PTU-142 HIGH PREVALENCE OF GASTROINTESTINAL STROMAL TUMOURS (GISTS): A CASE SERIES IN UK SECONDARY CARE

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Introduction Gastrointestinal Stromal Tumours (GISTs) are mesenchymal tumours, predominantly affecting the GI tract. Diagnosis and classification require specialist review and there are few published data on the incidence of GIST in the UK. Reported incidences elsewhere vary between 6.5/ million/ year in Norway and 14.5/ million/year in Sweden.[1,2] We have analysed our caseload of GISTs in a UK secondary care setting with a population of approx 350,000, in order to estimate incidence and review outcomes.

Methods A retrospective case note reviews of all patients with GIST, as identified from upper GI cancer MDT minutes, from 2008 to 2012 inclusive (5 years). The diagnosis of GIST was considered valid if characteristic imaging and/ or pathological features were verified by CT scanning, endoscopic ultrasound (EUS) needle aspiration/ biopsy and/ or surgical resection.

Results We identified 28 cases with a final diagnosis of GIST. The observed incidence varied between 4 and 8/ year, and estimated annual incidence was calculated at 16/million/year. The age range was 28–91 years (M 12, F16). Nineteen cases (68%) presented with signs or symptoms of GI blood loss; five (18%) with other GI symptoms and remaining cases were found incidentally. GIST size at presentation ranged from 1cm to 20cm in diameter. One case had metastasised at the time of diagnosis. EUS was used for diagnosis and staging in 15 cases; 13 had fine needle aspiration, of which 10/13 were diagnostic. 22 cases underwent resection surgery. 6 cases were treated with Imatinib (Glivec).

Conclusion Our review suggests a higher than expected incidence of GISTs in this population compared with other published series.[2,3] Most cases present with GI blood loss and surgery is curative in most cases. The incidence of GISTs in the UK is deserving of further study.

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Disclosure of Interest None Declared.

PTU-143 SHOULD WE INVESTIGATE MESENTERIC PANNICULITIS?: UK EXPERIENCE OF 58 PATIENTS

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Introduction Mesenteric panniculitis (MP) is an inflammatory condition of the bowel mesentery with characteristic features on CT (computer tomography). Studies suggest MP is associated with malignant pathology, previous abdominal surgery, inflammatory and autoimmune diseases. There is a lack of consensus on the clinical significance of MP and its further investigation.

Methods A retrospective analysis of medical records, imaging, endoscopy reports and histology.

Results 58 patients were identified with mesenteric panniculitis by CT criteria during the study period. 8 patients (13.8%) had undergone previous abdominal surgery. 12 patients (20.7%) had a previous history of malignancy; lymphoma 3, prostate 2, bladder 2, both lymphoma/bladder 1, leukaemia 1, endometrial 1, carcinoid 1, and bronchial 1.

Following index CT a new malignancy was identified in 5 patients (8.6%) and recurrence of a previous cancer in 1 (1.7%). 1 patient was diagnosed with lymphoma, 1 gastric carcinoma, 1 malignant myeloma, 1 bronchial carcinoma and 1 bladder cancer. 1 patient was diagnosed with a recurrence of a previously treated lymphoma. Of these 6 patients, 2 underwent endoscopic investigation; gastric carcinoma/lymphoma was suspected on index CT and endoscopy performed for histological confirmation.

Of the remaining 52 patients with MP on index CT (and no new or recurrent malignancy) 18 (34.6%) underwent further endoscopic investigation. None of these patients were diagnosed with a new malignancy at the time of endoscopy; a new diagnosis of ulcerative colitis was made in 2 (3.8%). 15 patients (36.8%) underwent a follow up CT scan within an 18 month period. None were diagnosed with a new malignancy at the time of follow up CT.

Conclusion This study suggests a high prevalence of malignancy amongst patients with MP on index CT. The diagnosis of MP on CT should alert the physician to the possibility of an undiagnosed malignancy.

MP is poorly understood and inconsistently followed up. Its diagnosis can lead to investigation with poor clinical yield and patient/cost implications. This study suggests a diagnostic strategy for underlying malignancy should focus on close evaluation and scrutiny of index CT prior to consideration of further investigation. A larger study is required to identify the prevalence of associated organ specific malignancies, define the diagnostic yield of further investigation and inform an evidence-based diagnostic approach.

Disclosure of Interest None Declared.

PTU-144 WHEN ARE GASTRIC ULCERS MALIGNANT? PREDICTORS OF BENIGN DISEASE

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Introduction Gastric ulcers can harbour malignancy and the National Institute for Health and Care Excellence (NICE) therefore recommends follow-up gastrocopy (FU-OGD). Predictors of

benign gastric ulcers can potentially reduce the burden of FU-OGD.

Methods All patients with a first endoscopic diagnosis of gastric ulcer between January 2012 and September 2013 at this large teaching hospital were included. Patients with known gastric ulcers prior to study period or those referred for tertiary assessment were excluded. We defined neoplastic disease as histological evidence of gastric dysplasia or malignancy. Benign disease was defined as patients with complete ulcer healing, those with 2 sets of benign biopsies and no endoscopic suspicion of malignant disease, or in cases without FU-OGD one set of negative biopsies and at least 360 days cancer free survival. Patients with insufficient follow-up were excluded. We analysed the influence of demographic, endoscopic and histological factors on the likelihood of benign disease using chi-square test for categorical and t-test for continuous variables. Independence of variables was analysed using linear regression analysis.

Results Of 377 patients included 350 (92%) had benign disease. 19 patients were diagnosed with adenocarcinomas, 2 with dysplasia, 5 with lymphomas, and 1 with melanoma. Patient sex, indication for gastroscopy and helicobacter pylori status did not influence the likelihood of benign disease. Benign disease was significantly associated with ulcer location in the antrum ($p = 0.001$), endoscopic benign appearance ($p < 0.001$), non-cratered ulcer morphology ($p < 0.001$), benign histology on 1st biopsy ($p < 0.001$), younger age (64 vs 73 years, $p = 0.02$), lower number of ulcers (1.4 vs 2, $p < 0.001$) and smaller ulcer size (10 vs 28 mm, $p < 0.001$). After linear regression analysis only endoscopic benign appearance ($p = 0.03$), benign histology on 1st biopsy ($p < 0.001$), lower number of ulcers ($p < 0.001$) and smaller ulcer size ($p = 0.004$) were independent predictors of benign disease.

Conclusion We have demonstrated that several simple factors collected during index endoscopy and ulcer biopsy can predict benign disease. Risk stratification according to those factors could be used to re-examine the need for FU-OGD for all patients with gastric ulceration. If prospectively verified the described predictive factors could be used to identify low risk patients who do not require endoscopy. This may be a strategy to reduce the burden of FU-OGD.

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PTU-145 HOW COMMONLY IS UPPER GASTROINTESTINAL CANCER DIAGNOSED FOLLOWING AN ENDOSCOPY THAT DOES NOT REPORT CANCER (AN ANALYSIS OF 11 YEARS OF NATIONAL DATA IN ENGLAND)?

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Introduction Oesophagogastroduodenoscopy (OGD) is the investigation of choice for excluding upper gastrointestinal cancer (UGIC). However, published studies suggest 14% of UGIC subjects had an OGD that failed to diagnose cancer in the 3 years prior to diagnosis (post gastroscopy UGIC (PGUGIC)). We have investigated the rate and risk factors for PGUGIC in a national data set in England.

Methods Hospital Episode Statistics (HES) collate information on all NHS hospital attendances in England. Subjects undergoing OGD without an UGIC diagnosis 6–36 months before subsequent diagnosis were identified as PGUGIC cases (definitely missed – OGD without UGIC diagnosis 6–12 months prior to UGIC diagnosis; probably missed – OGD without UGIC diagnosis 12–36 months prior to UGIC diagnosis) and subjects with no OGD 6–36 months before diagnosis served as controls. The influence of personal and institutional variables on PGUGIC were examined by multivariate logistic regression.

Results HES records from 2001–2012 were analysed including 5826932 OGD in 4163023 subjects. 132075 subjects were diagnosed with UGIC. 5659 (4.3%) definitely missed PGUGIC cases and 8518 (6.4%) probably missed PGUGIC cases were found. Gastritis/duodenitis (2512 subjects, 17.7%) and gastric ulcer (2117 subjects, 15.0%) were the most common coded findings in PGUGIC cases. Emergency OGD was negatively associated with PGUGIC compared with day case OGD (OR 0.70 (95% CI 0.67–0.73), $p < 0.001$). Female gender (1.19 (1.1–1.2), $p < 0.001$), South Asian (1.32 (1.2–1.6), $p < 0.001$) and Afro-Caribbean (1.26 (1.1–1.5), $p < 0.001$) ethnicity and comorbidities (liver disease (3.05, (2.3–4.1), $p < 0.001$), severe liver disease (3.01 (2.1–4.2), $p < 0.001$), peptic ulcer (1.98 (1.9–2.1), $p < 0.001$), pulmonary disease (1.17 (1.1–1.3), $p < 0.001$)) were associated with PGUGIC. Subjects with PGUGIC were less likely to undergo surgery (0.76 (0.7–0.8), $p < 0.001$) or chemotherapy (0.49 (0.47–0.51), $p < 0.001$) than controls, however, this did not affect overall survival, which was similar to controls. There was a fourfold variation in PGUGIC rates between units. Unit volume did not affect the rate of PGUGIC (lowest tertile volume compared with highest tertile 0.97 (0.9–1.1), $p = 0.5$). The annual rate of PGUGIC did not change over the study period.

Conclusion The rate of PGUGIC up to 3 year prior to UGIC diagnosis was 10.7% in England between 2001 and 2012. PGUGIC was associated with an elective procedure, female gender, ethnicity and comorbidities. PGUGIC subjects were less likely to have surgery or chemotherapy, although there was no effect on overall survival. There were large variations in PGUGIC rates between units but no evidence of a volume effect.

Disclosure of Interest None Declared.

PTU-146 THE TRINITY OF GASTRIC EMPTYING SCINTIGRAPHY, 13C ACETATE GASTRIC EMPTYING BREATH TESTING, AND REAL TIME GASTRIC ULTRASONOGRAPHY INDICATES HIGH PREVALENCE OF GASTRIC MOTOR DYSFUNCTION IN FUNCTIONAL DYSPEPSIA

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Introduction Gastric motor physiology can be assessed by gastric emptying scintigraphy (GES), ^{13}C breath testing (GEBT) and real time gastric ultrasound (GUS). The aim of this study was to evaluate how commonly these tests are abnormal in patients with functional dyspepsia (FD).

Methods Twenty-seven patients fulfilling the Rome III criteria for FD were enrolled in the study. All patients had a normal upper GI endoscopy and underwent standard GES using ^{131}I-technetium labelled mashed potato. On a separate day, these patients underwent a combined liquid GEBT (four hour breath test protocol using 170 ml chocolate Ensure liquid substrate + 50 mg ^{13}C-acetate) and GUS (calculating antral area at the time of ingestion and 15 min after ingestion of the GEBT liquid test meal).