for Paediatric Gastroenterology and Nutrition report there is no compelling evidence to treat children colonised with HP without histological evidence of gastritis. This reflects the current pathophysiological understanding of cancer development, where inflammation secondary to infection is believed to be the driver of dysplasia and cancer. In our tertiary referral centre current practice stains all paediatric gastric biopsies with Haematoxylin and Eosin stain (H+E) as well as Warthin Starry (WS) stain, specifically for HP-like organisms. The aim of this study was to investigate the incidence of HP infection in children undergoing endoscopy. We also examined the routine use of special staining on all gastric biopsies for HP and whether other histological features on H+E examination could act as reliable markers of infection allowing selective special staining.

Methods We reviewed all gastric biopsies submitted between January 8 and September 11, in patients born after 1989. All reports were loaded onto a database and searched for key words with "helico", "HLO" and "H Pylori". Each report was then examined for evidence of HP, acute inflammation and lymphoid aggregates.

Results 1102 cases were examined and 23/1102 were positive for HP, 2% of all cases. There was acute inflammation in 17/23 cases. In the six with no acute inflammation, two were suspected of having HP (one previously treated) and one had only a single biopsy from the body, not the antrum. 146/1102 (13%) cases had acute inflammation. Acute inflammation as a marker for HP has a sensitivity of 74%, specificity of 88%, PPV of 11% and NPV of 99%. Lymphoid aggregates and acute inflammation as markers of infection further increased HP detection.

Conclusion This study shows our current practice involves special staining of all biopsies for low prevalence disease (2%). However H+E examination alone has low sensitivity for picking up HP in cases of low density infection. Acute inflammation as a marker for HP infection could aid selection of cases for special staining. The NPV of 99% suggests that very few cases would be missed. Selective staining of cases for HP would also save around £3000/year (excluding pathologist time). The disadvantage that a small number of children colonised with HP, without gastritis may be missed is of unclear significance. Further research is required in order to develop an integrated clinical and pathological approach into the investigation, diagnosis and treatment of HP in children.

Competing interests None declared.

Pathology

PTU-136 DOES TOTAL NUMBER AND POSITIVE LYMPH NODE RATIO HAVE AN IMPACT ON OUTCOME FOLLOWING SURGICAL RESECTION FOR HILAR CHOLANGIOCARCINOMA?

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Introduction Lymph node status is an important predictor of survival following resection for hilar cholangiocarcinoma (HCCA). Controversies still exist regarding the extent of lymphadenectomy and whether an extended lymph node dissection improves outcome. This study aims to evaluate the prognostic value of the total number of nodes removed and positive lymphnode ratio (LNR) on overall and disease-free survival in patients undergoing resection for HCCA.

Methods From 1994 to 2010, 84 HCCA were resected at our Institution. Seventy-eight patients with available data were included in our analysis. Overall survival (OS) and disease-free survival (DFS)

were calculated and stratified according to the number of lymph nodes excised and positive LNR at different cut-off levels.

Results An average of 13.8 lymph nodes were removed. 45 patients (57.7%) had a positive lymph node status, with a mean of 3.2 involved nodes per patient. 1, 5 and 10-year OS for N+ status was 60%, 10% and 10%, while N- OS was 82%, 41% and 41% (p=0.000). Similarly, 1, 5 and 10-year DFS was worse in the N+ group (71%, 45% and 42%) compared to N- (91%, 65% and 60%) (p=0.045). There was no difference in 1, 5 and 10-year OS (70%, 23%, 20% vs 70%, 23% and 20%, p=0.690) and DFS (78%, 48% and 48% vs 82%, 58% and 58%, p=0.305) when <10 nodes were removed (n=39) compared to ≥10 nodes (n=36). There was no difference in 1, 5 and 10-year OS (63%, 9% and 9% vs 60%, 10% and 10%, p=0.562) and DFS (78%, 40% and 40% vs 65%, 46% and 40%, p=0.795) when LNR <0.25 (n=22) was compared to LNR >0.25 (n=23). No difference was found when a cut-off of 15 total excised lymphnodes and LNR of 0.50 was used.

Conclusion The overall number of lymphnodes excised and positive LNR did not correlate with overall and DFS in resected HCCA. Larger, prospective studies are necessary to confirm these results.

Competing interests None declared.

PTU-137 DOES A PROMPT FROM THE HISTOLOGY REPORT TO PERFORM SEROLOGY TO EXCLUDE COELIAC DISEASE MEAN THIS IS DONE?

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Introduction Lymphocytic duodenitis (LD) is a histological diagnosis comprising normal duodenal architecture, but an intraepithelial lymphocyte (IELs) count >25/100 enterocytes. A diagnosis of coeliac disease (CD) can be made in up to 16% of cases where LD is seen.¹ CD serology (antibodies to tissue transglutaminase) should be performed in all cases of LD. The aim of this study was to identify the rate of CD serological investigations following a diagnosis of LD.

Methods All duodenal biopsies taken at St Marys Hospital, London between March and August 2011 were evaluated. The histological reports for all duodenal biopsies coded as abnormal were reviewed. Serology results were checked in all cases where LD was diagnosed.

Results 280 duodenal biopsies were performed of which 24 met the criteria for a diagnosis of LD (8.6%). The indication for biopsy was anaemia in 12/24 (50%), dyspepsia in 4/24 (16.7%), abdominal pain in 3/24 (12.5%), dysphagia in 1/24 (4.2%) and an indication was not indicated in 1/24 (4.2%). The numbers of lymphocytes per 100 enterocytes varied from 26 to 62. Serological testing for CD was carried out prior to or following the diagnosis of LD in 12/24 (50%). In all cases where serology was performed the result was negative.

Conclusion Opportunities to diagnose CD are being missed in 50% of cases. These figures are similar to an audit carried out in the same department in 2009 which showed that serological testing for CD was being carried out in 56% of cases where LD was diagnosed. Diagnosis and treatment of CD has been shown to reduce morbidity and mortality^{2,3} and reduce the cost of medical care.⁴ Therefore it is important that opportunities to diagnose CD are taken and follow-up on the diagnosis of LD with serological testing by clinicians is imperative.

Competing interests None declared.

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