PTH-042 ENDOSCOPIC ULTRASOUND (EUS) FOR EVALUATION OF UNEXPLAINED DOUBLE DUCT SIGN WITH NORMAL LIVER BIOCHEMISTRY

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Introduction Incidental, unexplained biliary and pancreatic duct dilatation on imaging performed for other reasons is an increasingly common reason for EUS referral. The radiological 'double duct' (DD) sign is associated with pancreatobiliary (PB) malignancy, particularly in those with abnormal liver function tests (LFTs). However data regarding the yield of pathology at EUS in those with DD and normal live biochemistry are sparse. Our aim was to describe findings at EUS performed for investigation of DD in patients with normal LFTs.

Methods A retrospective review was performed of EUS procedures for investigation of DD across two tertiary HPB referral centres between 2013 and 2018. Those with abnormal or unknown liver biochemistry, or where expert review of cross-sectional imaging had indicated a mass lesion, stricture or other identifiable cause were excluded.

Results 46 patients were included, median age 64 years, 78% female/22% male. Long-term opiate use was documented in 17 (37%).

Positive findings were identified at EUS in 10 (21.7%); chronic pancreatitis (n=5), side branch intra-ductal papillary mucinous neoplasm (IPMN) (n=2), benign papillary fibrosis (n=2) and choledocholithiasis (n=1). Ductal dilatation was not seen at EUS in 3 (6.5%) and DD was present with no cause identified in 33 (71.7%), of whom 14 (30.4%) had documented opiate use. Both cases of IPMN lacked high-risk features and the patients remained well with a minimum of 18 months surveillance.

One endoscopic complication occurred in a patient without cause for DD sign identified at EUS, who sustained an endoscopic perforation requiring hepatico-jejunostomy.

Two cases of ampullary carcinoma were noted during case identification in patients with minimally elevated LFTs undergoing EUS for DD.

Conclusions In this cohort with DD and normal liver biochemistry there were no EUS-diagnosed malignancy and the yield of benign pathology was ~20%, similar to that previously reported⁴. However, this should be interpreted with caution given the 2 cases of malignancy, not included in this cohort, found with only mild LFT abnormalities and further prospective studies are needed.

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PTH-043 THE ACCURACY OF ULTRATHIN ENDOSCOPY IN THE DIAGNOSIS OF BARRETT'S OESOPHAGUS: SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction Screening for Barrett's oesophagus (BO) may be considered for those at high risk. Unsedated Ultrathin Endoscopy (UE) has been proposed as a more acceptable, cost-effective alternative to conventional oesophagogastrroduodenoscopy (C-OGD) but individual studies on the diagnostic performance of UE are often underpowered. The pooled diagnostic

Abstract PTH-043 Box 1 Forest plot of trials including in meta-analysis.

accuracy of UE (via trans-nasal or trans-oral insertion route) for the diagnosis of BO in adult patients with upper GI symptoms was analysed in this meta-analysis.

Methods A systematic literature search and meta-analysis was performed of all primary studies comparing UE (index test) to C-OGD. Electronic databases were searched from 1980 to November 1st 2018 and non-English language articles were excluded. We excluded studies where data on accuracy or BO presence were not extractable or if they used technology obsolete in current practice (fibreoptic and prototype models).

Data extraction was undertaken by two reviewers independently of each other who then cross-checked the consistency of their findings. The quality of included studies was assessed using a validated tool (QUADAS-2). Heterogeneity was examined both by visual inspection of the Forest plots, and by statistical assessment using the chi square and inconsistency (I^2) test. The bivariate model was used to obtain the estimates for accuracy. Data analysis was performed using Stata 12.1 software package (StataCorp, College Station, TX, USA).

Results Seven studies including 613 patients met the inclusion criteria. The pooled sensitivity, specificity, and area under the curve (AUC) for the diagnosis of BO were 0.98 (95% confidence interval [CI] 0.84–1.00), 1.00 (95% CI 0.86–1.00) and 1.00 (95% CI 0.99–1.00) on a per-protocol analysis. There was significant heterogeneity between studies ($I^2 = 0$ –95%; 95% CI 0–100). Success rate for both UE and C-OGD was lowest at 0.86 in a small study using unsedated trans-oral route, while all the other studies reported success rates ranging from 0.89 to 1.0 for UE (including unsedated trans-nasal route) and from 0.98 to 1.0 for SE. The majority (0.54–0.71) of patients preferred UE compared to C-OGD and said they were willing to have UE again in the future if necessary. The mean tolerability scores for unsedated UE were significantly better in 4 studies, similar in 1 and not reported in the others.

Conclusions Unsedated UE is accurate in detecting BO and may be more acceptable to patients compared to C-OGD. However, there was significant heterogeneity across studies which limit the interpretation of the pooled results. This could have a bearing for future consideration of the value of Barrett's screening but its utility warrants further evaluation.

PTH-044 EFFECT OF RENAL FAILURE ON THE OUTCOME OF UPPER GI HAEMORRHAGE INCLUDING RISK SCORING

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Introduction Renal failure is associated with poorer outcome following upper gastrointestinal haemorrhage (UGIH) and is a parameter in some pre-endoscopy risk stratification scores which can be used to identify low-risk patients who may avoid admission. We studied the outcome of patients admitted with UGIH in relation to their renal function and risk stratification scores.

Methods Prospectively collected data from a 1-year international multi-centre study of consecutive patients presenting

with UGIH. Demographics, endoscopic findings, treatment and outcomes were recorded. eGFR was determined retrospectively from admission creatinine. If eGFR was <60 ml/minute, it was recorded whether this was acute kidney injury (AKI) or chronic kidney disease (CKD) by review of electronic patient notes. Glasgow Blatchford (GBS), admission Rockall (aRS), AIMS65 and PNED scores were determined. Need for endoscopic therapy, transfusion, surgery, rebleeding >7 days and 30-day mortality rates were recorded.

Results Main findings are shown in table 1 as median or percentage except where indicated.

Abstract PTH-044 Table 1

	Normal renal function	AKI	CKD	p value
Number	1208	165	250	
Age	52	75	82	<0.0001
Female	39.7%	42%	50%	<0.05
Time to present (h)	10	12	12	NS
Endoscopy findings:	12.0%	11.5%	12.4%	NS
Normal	17.9%	24.2%	19.2%	
Benign ulcer	5.2%	6.7%	4.4%	
Varices	2.2%	0%	2.4%	
Cancer	27.6%	24.2%	18.4%	
Not scoped				
Endoscopic therapy	18.6%	25.9%	27.6%	<0.001
Surgery	0.6%	0	1.2%	NS
Rebleed <7 days	4.6%	8.4%	6.8%	0.06
30-day mortality:	1.2%	7.2%	4%	<0.0001
Bleed related	3.1%	10.8%	13.2%	
Non-bleed related				
Transfusion	27.7%	41.6%	49.6%	<0.0001
Transfusion (average units)	3.7	4.7	4.4	<0.05
Need for treatment or Died	37.5%	57.8%	63.2%	<0.0001
Length of stay (average in days)	3.96	8.11	6.58	<0.0001
GBS ≤1 (% sensitivity, specificity)	30.0%, 94.6%, 51.6%	1.9%, 100%, 58.9%	2.0%, 100%, 64.8%	
AIMS65=0 (% sensitivity, specificity)	44.2%, 79.1%, 54.1%	22.7%, 70.4%, 91.3%	6.4%, 80%, 66.8%	
aRS=0 (% sensitivity, specificity)	21.7%, 85.6%, 44.2%	1.2%, 100%, 58.8%	1.6%, 75%, 64.2%	
PNED ≤1 (% sensitivity, specificity)	52.8%, 80.5%, 57.2%	18.9%, 53.6%, 63.3%	12.4%, 67.9%, 65.7%	

Conclusions Patients admitted with UGIH and renal impairment are older and more likely to be female, than those with normal renal function. Transfusion requirements, need for endoscopic therapy, rebleed rate and mortality (bleed and non-bleed related) and are all increased in this group. GBS identifies low risk patients with AKI or CKD with high sensitivity, although few low risk patients are in this group. No other commonly used pre-endoscopy risk score is accurate in identifying low-risk patients with renal impairment.