Thursday 3rd July

0915  Registration and Coffee

0950  Welcome
   Dr Philip Shields

1000  Update in Neurogastroenterology
   Prof Shaheen Hamdy
   Chair: Dr Philip Shields

1100  Coffee
   Exhibition Hall

1145  State of the Art Lecture
   Applying Molecular Knowledge to Clinical Problems in Barrett’s Carcinogenesis
   Prof Rebecca Fitzgerald
   Chair: Prof Shaheen Hamdy

1245  Lunch
   Poster Round
   Exhibition Hall

1345  The role of optineurin in macrophage cytokine secretion and bowel inflammation
   Dr T Chew

1400  Investigating the role of integrin β1 in hepatic stellate cell activation and liver fibrosis
   Dr K Martin

1415  Manifestation of Crohn’s Disease in the Upper GI Tract
   Dr Simon Everett
   Chair: Dr Neeraj Prasad

1500  Coffee
   Exhibition Hall

1530  RFA in Barrett’s Oesophagus
   Dr Rob Willert
   Chair: Prof Chris Summerton

1600  Final Year Symposium
   Myths & Facts About PPIs
   Dr Geeta Beejooa & Dr Christopher Calvert
   Chair: Prof Chris Summerton

1645  Deanery Training Issues: JETS, MSc, AOB
   Dr P Shields

1700  Trainee Survey (trainee only session)
   Dr W Gashau & Dr K White

1730  Close

1930  Buffet Dinner
**Friday 4th July**

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<td>Biodegradable oesophageal stents are a useful adjunct in the treatment</td>
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<td>Gastrointestinal toxicity recorded by patient reported outcomes with Volumetric Modulated Arc Therapy to treat gynaecological malignancy</td>
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<td>Rifaximin treatment in Hepatic Encephalopathy (HE) - Marked reduction in hospital admissions and hospital bed day occupancy in a UK District General Hospital</td>
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<td>Duodenal bulb biopsies for the diagnosis of coeliac disease</td>
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<td>Conference Dinner &amp; Ceilidh</td>
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The Role of Optineurin in Macrophage Cytoplasmic Secretion and Bovine Inflammation
Theyan Soon Chew1, Gavin W Sewell1, Nicola R O’Shea1, Stuart I Bloom1, Andrew M Smith1, Anthony W Segal1
1Division of Medicine, University College London, 2Department of Gastroenterology, University College London, 3Eastman Dental Institute, University College London, United Kingdom

Introduction
Celiac disease (CD) is a chronic inflammatory disease of the gastrointestinal tract. We previously showed that macrophages from CD patients secrete lower levels of proinflammatory cytokines due to defective trafficking defects1, which may be responsible for the deficient neutrophil recruitment in bowel2 and decreased bacterial clearance observed in CD patients compared to healthy controls (HC)1. To investigate the low cytokine secretion, we performed transcriptomic analysis in CD and healthy controls and identified a subgroup of CD patients with low expression of optineurin (OPTN).

Methods
Optn+ and Optn− intermate mice were generated with Citobacterodendron, which induces a colitis. Bone marrow derived macrophages were stimulated with heat-killed E. coli (HKE) then TNF and IL6 gene expression and cytokine secretion were measured. Confocal microscopy of TNF and early endosome antigen 1 (EEA1) was performed. HKEC stimulated macrophages were incubated with lysosomal inhibitors monensin, chloroquine and NH4Cl to investigate defective vesicle trafficking.

Results
The C. rodentium colitis resulted in greater weight loss (p<0.0001) and mortality (p=0.007) in the Optn−/− mice. This was associated with decreased serum TNF (p=0.031) and IL6 (p=0.02) levels in the Optn−/− mice (p=0.02) that may account for the later greater colitis on histological colitis scores (p=0.04). Optn+ macrophages secretes less TNF (p=0.006) and IL6 (p=0.02) despite similar levels of mRNA expression. Confocal microscopy of TNF and EEA1 showed increased colocalisation of TNF and the endosomal compartment in Optn−/− macrophages (p=0.04) after bacterial stimulation. Lower intracellular TNF levels in Optn+ macrophages were normalised to wildtype levels when lysosomal inhibitors were added suggesting that this is mistrafficked in Optn−/− macrophages to lysosomes.

Conclusion
OPTN has a known role in vesicle trafficking and bacterial handling1. The C. rodentium colitis model shows that OPTN plays a crucial role in enteric bacterial handling, most likely via defective cytokine secretion of tissue resident macrophages. This defect is likely due to impaired trafficking of TNF from the Golgi complex to the endosomal compartment. Diminished OPTN expression in humans may increase the risk of developing CD via impaired cytokine secretion and defective bacterial clearance.

References

Investigating the Role of Integrin β1 in Hepatic Stellate Cell Activation and Liver Fibrosis

Katherine Martin1, James Pritchett1, Emma Harvey1, Varinder Atwal1, Jessica Llewellyn2, Charles Streuli2, Leo Zeef1, Neil Hanley1 and Karen Piper Hanley1
1Institute of Human Development, Faculty of Medical and Human Sciences and 2Faculty of Life Sciences, University of Manchester, UK

Liver fibrosis is characterised by excessive extracellular matrix (ECM) deposition from hepatic stellate cells (HSCs) as they become activated in response to injury. One of the receptor systems involved in ECM mediated responses is the integrins. We have identified integrin β1 (Itgb1) plays a central role in HSC activation through regulating contractile actin cytoskeletal proteins relevant to mechanosensory signalling. Itgb1 was localised to stress fibres and elevated in activated primary HSCs, alongside the profibrotic factors Sox9, type I collagen (Col1) and α-smooth muscle actin (α-Sma). Using an Itgb1 mouse model to delete Itgb1 in HSCs resulted in cells resembling a more quiescent phenotype with reduced profibrotic markers and stress fibre formation (localisation of F-actin, α-Sma and vinculin). Itgb1 null HSCs were less migratory and contractile, with reduced profibrosis. Expression microarray and pathway analysis indicated differential gene expression involved in migration and contraction in Itgb1 depleted HSCs. Further analysis highlighted the activator protease matrix metalloproteinase 2 (MMP2) and matrix metalloproteinase 9 (MMP9) as key molecules regulating Itgb1 activity.

Conclusion
Itgb1 and its ligands are important drivers of HSC stress fibre formation and motility. By lowering the levels of Itgb1, we were able to identify potential therapeutic targets.

References

Endoscopic Management of Barrett's Dysplasia and Early Oesophageal Adenocarcinoma within a Regional UK Centre

Leo HY, Willert RP
Central Manchester University Hospitals NHS Foundation Trust

Introduction
Endoscopic approaches, such as HALO radiofrequency ablation (RFA) and endoscopic mucosal resection (EMR), are increasingly used as management options for early oesophageal adenocarcinoma. Patients with Barrett's dysplasia with or without early cancer, managed in centres contributing to the UK National HALO RFA Registry, receive HALO RFA ablation sessions at 3-monthly intervals for 1 year with EMR performed at any point if any nodularity or suspicious features are seen. Following this, annual surveillance gastroscopies are performed to monitor for recurrence.

Objective
To explore the outcomes of RFA and EMR for Barrett's dysplasia in the North West region of United Kingdom and to compare this to a previously published nationwide study1.

Method
Our regional retrospective data from the UK National HALO RFA Registry was collected and analysed.

Results
Fifty-nine patients underwent HALO RFA with Barrett's dysplasia from October 2009 to March 2014. Of these, 3 patients aged 64 years (1 male, 2 females, male age 67 years) have completed RFA as per protocol or achieved Barrett's eradication (BE). Histological grades at study entry were low grade dysplasia (LGD) (2%, n=3), high grade dysplasia (HGD) (70%, n=26), intramuscular carcinoma (IMC) (19%, n=7) and previously treated invasive cancer (3%, n=2). The extent of Barrett's mucosa assessed as per Prague criteria with mean circumferential length of 2.6 cm (range 0-13 cm) and mean maximal length of 3.7 cm (range 0-15 cm). Two patients required rescue EMR while still undergoing RFA sessions.

At 12 months, or post Barrett's eradication if sooner, HGD clearance was 97.2% (n=36), all dysplasia 94.6% (n=33) and Barrett's metaplasia 78.4% (n=29), compared to national data of 86%, 81% and 62% respectively. After mean follow up period of 22.7 months from first ablation treatment, HGD clearance was 94.6% (n=33), LGD clearance was 97.9% (n=33) and Barrett's metaplasia 73.0% (n=27). One patient developed an inflammatory oesophageal stricture following RFA requiring dilatation without further symptoms.

Conclusion
Combined HALO RFA and EMR provide a safe, efficacious means of managing Barrett's dysplasia with a durable response. Regional variations in patient characteristics, operator experience and technical approach may explain the differences in outcomes. Factors associated with Barrett's eradication were Barrett's mucosal extent, age and EMR performed prior to RFA therapy.

References

Endoscopic versus Histological Assessment of Colonic Polyp Size

WJ Gashau, C Kong, HY Lee, RP Willert
Central Manchester Foundation Trust, Manchester

Introduction
Colonic polyp size is a factor in determining management and prognosis of patients. Polyp diameters greater than 10mm require ongoing colonoscopic surveillance. Accurate endoscopic estimation of polyp size can be affected by depth perception and parallax errors. We compared 16 endoscopists’ polyp size estimations to determine if accurate estimation was operator-dependent.

Methods
Symptomatic and asymptomatic (bowel screening) patients were identified from hospital databases. Endoscopic and histological polyp diameters were recorded. Agreement levels between these were analysed by deriving intraclass correlation coefficient (ICC) using SPSS software (Version 20).

Results
Sixteen colonoscopists were included. 5 bowel screening, 7 non-bowel screening and 4 trainees. Five hundred and forty-six polyps were measured. Colonoscopists measured polyp size on average 1.7 times. ICC values ranged from 0.000 to 0.791 (mean 0.402 ± 0.204). Only 12% (n=59) of polyps were measured within 10% of histological size. However, 15% (n=69) were within 20%.

Conclusion
Endoscopic estimation of polyp size is limited with significant operator variability.

References
Biodegradable Oesophageal Stents are a Useful Adjunct in the Treatment of Dysphagia in Patients Undergoing Radiotherapy for Oesophageal Malignancy

The Christie NHS Foundation Trust, Manchester

Purpose

Dysphagia is common in patients with oesophageal malignancy and is exacerbated during radiotherapy due to treatment-related oesophagitis. Optimising nutrition during radiotherapy treatment is important, often requiring supplementation with insertion of a radiologically-inserted gastrostomy. Metal stents can interfere with radiotherapy, planning and delivery, and are reserved for palliation.

Biodegradable (BD) stents are made of woven polydioxanone and are placed in the same way as metal stents. They biodegrade over a period of 6-12 weeks. Currently, BD stents are licensed for use in benign oesophageal strictures. They have been used at our centre as a treatment for malignant dysphagia, to maintain a degree of luminal patency and bridge patients through chemoradiotherapy without the need to subsequently remove the stent. The aim of this study was to determine the clinical effectiveness of BD stents for this indication.

Methods

Clinical data including demographics, disease characteristics and therapy were obtained retrospectively from electronic records of 22 patients who had biodegradable stents inserted pre-radiotherapy for oesophageal malignancy between 2009 and 2013. For further clinical data regarding O’Hourane score, complications and further intervention was collected from casenotes.

Results

Of 22 patients there were 14 men and 8 women. Mean age at time of stent insertion was 72.9 years (range 35-88), with 50% of patients having adenocarcinoma and 50% squamous cell carcinoma. No patients had metastatic disease. The tumour was located in the upper oesophagus in 1 patient, mid in 6, lower in 10 and GOJ in 5 patients. Patients had a performance status of 0-2 with the exception of one patient with a performance status of 3.

All stents were inserted radiologically. 2/22 required two stents in one procedure, with a single stent placed in 20/22. Five patients had radiologically-inserted gastrostomies placed at the same time as, or a few days before stenting. Fourteen patients had O’Hourane dysphagia score recorded 1-3 weeks following stent insertion. This improved in 8, remained the same in 4 and deteriorated in 2 patients. One patient is still alive 972 days following insertion. The other patients had a mean survival of 196 days (range 68-792) after stenting.

Complications occurred in 8 patients in an immediate 2 week period, including: pain (2), vomiting (1), dysphagia requiring dilatation (1), food obstruction requiring intervention (1), food obstruction requiring intervention (2), and upper gastrointestinal bleed not requiring intervention (1).

Re-intervention was required in 40.9% within a 4-month period. Further stenting was required in 3 patients, dilatation in 2 patients, dilatation then stent in 1 patient and enteral feeding in 4 patients (this does not include the aforementioned patients who had a RIG at time of BD stent insertion). The mean time to re-intervention was 43 days (range 7-93).

Conclusion

Biodegradable stents allow patients to maintain oral feeding (potentially alongside supplemental enteral feeding) while they undergo radiotherapy for oesophageal malignancy. This has benefits in terms of quality of life. In our study we found an acceptable rate of complications. Furthermore the mean time to re-intervention was over 6 weeks which fits with the expected lifetime of the stent.

Pancreatic Duct Dilatation should be Investigated with Endoscopic Ultrasound if Computerised Tomography Fails to Identify a Lesion

KL White, P Kellati, P Borg, L Bhatt, A Jackson, H Laasch, T A Moss and A Jackson
Gastroenterology, University Hospital South Manchester, Manchester, United Kingdom

Introduction

A dilated Pancreatic Duct (PD) may be associated with pancreatic disease, but this is infrequently investigated further if no lesion is found on Computerised Tomography (CT). There is limited data on the role of Endoscopic Ultrasound (EUS) with dilatation without a cause on CT, as the literature mostly describes the utility of EUS with apparent pancreatic lesions. We describe our experience of EUS in identification of causative lesions not apparent on CT.

Methods

Sixty-one (61) cases were identified and retrospectively reviewed between 2007-2013 by searching the EUS database at a university teaching hospital. All had CT +/- MRCP findings of dilated PD (+/− Common Bile Duct (CBD) dilatation) and no pancreatic lesion (54 patients) or oedema/unable to exclude a lesion (7).

Results

Mean patient age was 70 (41-90). Indications for CT included abdominal pain 16, abnormal Liver Function Tests (LFT) 14 (3 jaundiced), weight loss 9; other 14 (eg: staging CT for lung ca, CT colonoigraphy for diarrhoea etc). Mean diameter was 6mm (3.25mm) and 3 had CBD dilatation. CT showed normal pancreatic parenchyma in 46 (76%); prominent ampulla 5 (8%); pancreatic cyst 5 (8%); calcification 4 (6.5%); pseudocyst 1 (1.5%). After EUS, 49 (80%) had PD dilatation confirmed, while 13 (21%) also had CBD dilatation. 38 (62%) failed to identify a cause and hence agreed with CT. Of the remaining 23 (38%) there was disparity between CT and EUS. An FNA biopsy was performed in 16 (26%).

Findings included neoplasm 9 (15%); IPMN 4 (6.5%); pseudocyst 1 (1.5%); chronic pancreatitis 3 (5%); pancreatic divisum 1 (1.5%). Neoplastic disease included pancreatic cancer 5, suspicious ampullary tumour 2, cholangiocarcinoma 1, and mucinous cystadenoma 1. With particular reference to IPMN, there was isolated PD dilatation in 27 cases (44% of total), and abnormalities detectable in 59% which included cancer or IPMN (15%). In PD and CBD dilatation 22 (36%); 6 cases were abnormal of which 4 (18%) had cancer (pancreas and ampulla). Without PD dilatation 12 (20%); pathology was found in 30% including cholangiocarcinoma 1, IPMN 1, CBD stones 3, chronic pancreatitis 1. Of 9 cancer patients, dilatation was seen in PD only 4; PD and CBD 4; normal PD or CBD 1.

Conclusion

PD dilatation should be investigated further with EUS, even when CT shows no causative lesion. We identified a significant percentage of benign (21%) and malignant (15%) pathology with EUS. EUS offers the additional advantage of biopsy when there is diagnostic doubt. Normal LFTs and the absence of the ‘double duct sign’ are insufficient to exclude neoplastic disease and EUS will help identify these.
Predicting Histological Remission in Patients with Coeliac Disease on a Gluten Free Diet

Peter D Mooney, Matthew Kurien, Simon Wong, David S Sanders
Royal Hallamshire Hospital Sheffield

Introduction
Up to 30% of patients with coeliac disease will have persistent symptoms despite the introduction of a gluten free diet. Assessment of adherence in coeliac disease can involve any combination of patient self-reporting adherence, dietary assessment, serology and biopsy with histology. Histology is considered to be the ‘gold standard’ but this requires a repeat endoscopic examination with its associated risks and problems with tolerance. As a result surrogate markers of persistent gluten exposure and histological changes such as serology are frequently used but the relationship between serology and persistent histological changes is not linear. A structured interview with a dietician has been shown to be the most accurate method of assessing gluten exposure however this is time consuming and requires extra clinic visits. The aim of this study was to assess the usefulness of two novel options. Firstly a previously internally validated scoring system for assessing dietary adherence (which has never been externally validated) and secondly a rapid de-amidatedglutamin peptide based point of care test (POCT, Simtomax) for the prediction of persistent VA.

Methods and Analysis
All patients with known coeliac disease and persistent symptoms coming to a specialist coeliac endoscopy list for the re-assessment of histology were invited to take part. All patients were tested for Endomysial Antibody (EMA), tissue transglutaminase (tTG), immunoglobulin G (IgG) anti-tTG and anti-EMA. Patients were recruited between April 2013 and April 2014. 22 endoscopies required however none of the methods assessed for the prediction of persistent VA could be reliably used to replace duodenal biopsy in assessing remission in coeliac disease.

Gastrointestinal Toxicity Recorded by Patient Reported Outcomes with Volumetric Modulated Arc Therapy to Treat Gynaecological Malignancy

KL White, JA Routledge, JE Lesley, LH Barraclough and SE Davidson
The Christie NHS Foundation Trust, Manchester

Purpose
Volumetric Modulated Arc Therapy (VMAT) is a new type of external beam radiotherapy and has been shown to deliver less radiation dose to the organs at risk than traditional conformal therapy on dosimetric studies. It is hoped that this will lead to less gastrointestinal acute toxicity (and subsequent late effects) however this has not yet been shown. We aimed to determine the rate of gastrointestinal toxicity in the treatment of gynaecological malignancy with VMAT.

Methods
This was a prospective study. Patients were asked to fill in questionnaires prior to commencing radiotherapy and on their final day of treatment (end of week 4). In all cases questionnaires were completed after external beam radiotherapy and prior to brachytherapy. The symptom questionnaire used was a validated patient reported questionnaire derived from the CTCAE (Common Terminology Criteria for Adverse Events) grading system.

Results
Demographical and treatment data for the 27 patients in the group are shown in Table 1. Twenty four patients completed the baseline questionnaire and 27 completed the week 4 questionnaire.

Nineteen of 27 (70%) VMAT patients reported diarrhoea at week 4 compared with 6/24 patients (22%) at baseline. In terms of faecal urgency this was grade 3 or 4 in 87% at week 4 versus 38% at baseline. The proportion of patients requiring medication for diarrhoea was 74% at 4 weeks versus 13% at baseline. Seventeen of 27 patients had Grade 3-4 tenesmus at week 4 compared with none of the patients at baseline. Vaginal bleeding was reported by 11% of the patients at end of treatment versus 9% prior to treatment.

Conclusion
To our knowledge this is the first report of rates of patient-reported gastrointestinal toxicity related to VMAT in the treatment of gynaecological malignancy. Our data suggests that VMAT does cause acute gastrointestinal toxicity during radiotherapy treatment although a significant number of patients have baseline gastrointestinal symptoms. Future comparative work is planned to determine whether VMAT confers benefit over conventional treatment in terms of acute and late gastrointestinal toxicity associated with radiotherapy for the treatment of gynaecological cancers.

Table 1: Baseline patient (n=27) characteristics

| Age | Mean: 57.1 | Median: 59 | Range: 24-89 |
| Cancer site | Cervix: 13 (48%) | Endometrium: 11 (41%) | Other: 3 (11%) |
| Stage of disease | I: 10 (37%) | II: 11 (41%) | III: 3 (11%) | IV: 2 (7%) |
| Treatment received | Radiotherapy: 7 (26%) | Radiotherapy + surgery: 5 (19%) | Chemoradiotherapy: 7 (26%) | Chemoradiotherapy + surgery: 8 (30%) |

Cetuximab added to cisplatin for advanced gynaecological malignancy: A pilot study

Crompton, Kieran J Moriarty
The Christie NHS Foundation Trust, Manchester

Background
Radiotherapy is the mainstay of treatment with cisplatin used as concomitant therapy for HE. We compared the clinical features and diagnoses for the number of, and length of each hospital admission for the 6 months before, and 6 months after, commencing Rifaximin treatment.

Results
30 patients with HE (18 men, 12 women), median age 64 (Inter-quartile range (IQR) 51-76), were commenced on Rifaximin. 83% had Alcohol-related liver disease, 10% NASH and 7% Hepatitis C. Median MELD score was 15.5 (IQR 13-21). All patients were prescribed lactulose. Of the 30 patients, 5 died within 6 months of commencing Rifaximin. One patient was discontinued, due to non-compliance. 24 patients were included in the final analysis. We compared the outcomes for the 6 months prior to, and the 6 months after commencing Rifaximin treatment. Median hospital admissions were reduced from 2 (IQR 1-3, Range 1-5) to 1 admission (IQR 0-2, Range 0-4, Wilcoxon p<0.05). Median number of bed days was reduced from 27.5 (IQR 16.0-35.3, Range 2-128) to 2.5 (IQR 0-23.5, Range 0-55, Wilcoxon p<0.05). No patient developed Clostridium difficile-associated diarrhea in the 6 months after commencing Rifaximin.

Summary and Conclusions
In our hospital, the basic cost of a hospital bed day is £300 (480 US dollars). A 6 month course of Rifaximin costs £1688 (£2700 US dollars). This study demonstrates that Rifaximin treatment in patients with HE, due to chronic liver disease, produced a marked reduction in hospital admissions and hospital bed day occupancy in a UK District General Hospital, with major cost savings and improved clinical outcomes.

Rifaximin Treatment in Hepatic Encephalopathy (HE) - Marked Reduction in Hospital Admissions and Hospital Bed Day Occupancy in a UK District General Hospital

Anurag Goel, Neena Patel, Rebecca Blackwell, Sandra Crompton, Kieran J Moriarty
Royal Bolton Hospital, Bolton, Lancashire, UK

Background
Rifaximin is a minimally absorbed, gut-selective antibiotic, which is safe and effective in the prevention and treatment of Hepatic Encephalopathy (HE). How-
Coeliac disease (CD) is a common autoimmune condition. However it remains underdiagnosed. Historically diagnosis relied on demonstration of villous atrophy (VA) in distal duodenal or jejunal biopsies. Recent studies have suggested that the duodenal bulb (D1) may be the only site of VA in some CD patients. The addition of a D1 biopsy may therefore increase CD detection.

Methods

Patients were recruited from a single UK hospital with a specialist CD centre. All patients with suspected and known CD attending a specialist endoscopy list were invited to take part. All patients had standard serology, at least 4 biopsies from the second part for the duodenum (D2) and at least 1 D1 biopsy. A group of patients with a high suspicion of CD had quadrant biopsies taken from 12, 3, 6, and 9 O’clock positions in D1 to ascertain the ideal site for biopsy. Demonstrations of VA was required to make a diagnosis of CD.

Results

903 patients without prior diagnosis and 122 patients with known CD were recruited. This included a subgroup of 171 new presentations and 45 known CD patients who had a quadrantal D1 biopsies. 184 (20.4%) new CD diagnoses were made including 10 (5.4%) seronegative CD. D2 biopsies had a sensitivity 89.7 (84.1 – 93.3), specificity 99.6 (98.7 – 99.9), positive predictive value 98.2 (94.5 – 99.5) and negative predictive value 97.4 (95.9 – 98.4). This improved to 100% (97.5 – 100) 99.2% (98.1 – 99.7) 96.8% (92.9 -98.7) and 100% (99.3 – 100) when D1 biopsies were included.

For new diagnoses of CD in D1 10.3% changes were only seen in the bulb (P<0.0001) and for known CD patients 7.4% (P<0.0001). The most significant lesion was more likely to be only in D1 compared to D2 in new CD (28.2 vs 12.5%, P(0.001) and known CD (19.7 vs 9%, P(0.04)

For the optimal site for D1 biopsy there was statistically no difference between the 4 quadrants for either new patients (P=1) or known CD (P=1)

There was moderate correlation between D2 histology and tissue transglutaminase titres (r0.540), the addition of a D1 biopsy did not improve the correlation significantly (r0.560). No cut off for IgT could be reliably used to diagnose CD.
Comparative Study of Hybrid Technique versus Fluoroscopic Technique for Insertion of Self Expanding Metallic Stents (SEMS) in Non Traversable Oesophageal Tumors

A Goel, N Ishaq, E Darling, V Mahesh
Blackpool Victoria Hospital

Introduction
Endoscopic technique (ET) for SEMS insertion has previously been shown to be safe, effective, less time consuming with improved positioning especially of the proximal end of the stent. The obvious limitation of ET is in non-traversable tumours (with standard endoscope), requiring ultrathin fibre endoscope for SEMS fluoroscopy only, in patients with non-traversable tumours, with the added advantage of more accurate positioning of the proximal end of the stent under direct endoscopic visualization. Limitations of the study are its retrospective nature, lack of data on diameter of stents.

Methods
110 procedures were carried out on 96 patients (54 females, 42 males) with a median age of 77.5 years (Range 69-83.25) and 52-99 years. Median age of pts was 41 (range 20-79) yrs. Total lifetime yrs on HRT was 9.5 (Range 4-18). 75 patients had adenocarcinoma, 19 squamous cell carcinoma (15 females, 4 males). Of these patients, 70 over 50 yrs are more likely to have an AE on Ifx. Patients over 60 yrs are more likely to suffer from an AE with increasing age (p=0.005).

Results
54 (40.6%) pts had AEs whilst on ifx (see Table 1 for severity), including solid organ tumours (2 pts), cutaneous sarcoidosis (7), cutaneous SEs (5), thyroiditis (2), idiopathic thrombocytopenic purpura (1), cutaneous TB (2), infusion reaction (3), cutaneous side effects (5), 7 other infections (12). 33 pts were still on ifx at the time of this study. 30 pts (92.3%) had stopped ifx due to AEs. 13 pts had an infusion reaction. Pts were most likely to have an infusion reaction at infusion 2 (6 pts).

Conclusion
The introduction of a consultant assessment as a first contact for all OGD 2WW referrals has led to a significant reduction in the requirement of urgent outpatient clinic appointments by one third. Waiting times for all clinic referrals have reduced significantly, there has been a 54% reduction in the number of patient waiting more than 9 weeks for a first appointment. Cancer detection is comparable to the previous model of care. Patients with ongoing symptoms at the time of endoscopy need follow up. In hindsight the missed cancer should have had an oesophageal biopsy, but this is clinical judgement and we do not believe the new service accounted for this delay.

Table 1

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The Management and Assessment of Incidental pancreatic Cysts on Computed Tomography in a Non-Pancreatic Centre

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Introduction
With increased use and sensitivity of cross sectional imaging more incidental pancreatic cystic lesions are found. Studies have demonstrated a prevalence of 2.5% of cystic pancreatic lesions in asymptomatic patients with HCV or in those with alcohol abuse. Cystic pancreatic lesions have a wide variety of radiological appearances and prognostic outcomes. We aimed to review cases found to have incidental pancreatic cysts on CT scanning and ascertain the concordance between CT and EUS and the management of such lesions in a non-pancreatic centre.

We retrospectively reviewed patients undergoing EUS for pancreatic cystic lesions found on incidentally on CT scan between 2010 and 2012. Twenty-five patients were included. Solid lesions with a cystic component were excluded.
Radiofrequency Ablation for the Treatment of Oesophageal Dysplasia and Early Neoplasia – Outcomes from a Tertiary Centre in the United Kingdom

Salford Royal Hospital

Introduction and Aims
Radiofrequency ablation (RFA) and endoscopic mucosal resection (EMR) are increasingly used in the treatment of Barrett's oesophagus (BO) with high or low grade dysplasia (HGD, LGD) and early intramucosal carcinoma. We aim to study patient outcomes after undergoing RFA at a tertiary teaching hospital.

Methods
We retrospectively reviewed patients who underwent RFA for Barrett's dysplasia and or T1a cancer since its introduction in our unit. Dysplasia clearance rates at 3 and 12 months following RFA to HGD, LGD and or satisfactory in 71% (17/24). Even in patients admitted specifically for bowel prep one third (2/6) had poor prep although this did not prevent caecal intubation. Completion rate for patients undergoing inpatient bowel preparation due to comorbidities, the numbers of bed days saved. Data collected from April-October 2013 were analysed.

Results
808 patients were reviewed with 68% being male. The major- ity referred for the acute admissions, with 23% referred from the Emergency Department and 47% from the Medical Assessment Unit. Patients were reviewed within an average of 12 hours since referral time (range 3-36 hours). Delayed discharges were frequ- ently identified in patients on a reducing regime of Chlorozid- aspose. The majority of patients were being kept to complete this regime, regardless of whether they planned to stop drinking or not. On discharge, patients were not being offered follow up in the community which often led to reattendance and re-admit- tance at hospital seeking further detoxification. The HALS team reviewed and assessed these patients with validated assessment tools including the Severity of Alcohol Dependency Question- naire (SADQ) and Clinical Institute Withdrawal Assessment Score (CIWA). The level of misuse was calculated as low risk in 127 pa- tients, dependent in 382, harmful in 126, hazardous in 166, de- tox in 1 and unknown in 6 patients. Existing treatment regimes were reviewed to ensure they were appropriate and timely, and patients were identified for safe and early discharge with early community follow up. A total of 641 bed days were saved over the time period analysed.

Conclusion
Implementation of a 7-day HALS team covering two acute hos- pital sites has significantly improved the quality of care provided to patients with alcohol related disorders. In addition there has been a very positive impact on reducing length of stay and bed occu- pancy. Plans are in place to develop and audit the HALS team further and strengthen working relationships with com- munity partners.

Inpatient Colonoscopy: Right reason, Wrong Test
Chełomy and South Ribble District General Hospital

Introduction
The British Society of Gastroenterology (BSG) has produced guidance on the indications for diagnostic colonoscopy as well as bowel preparation and faecal sampling. In 2012, the BSG published literature. RFA appears to be a safe procedure with low morbidity and no mortality.

Effectiveness of a Nurse-led Alcohol Liaison Team in Reducing Admissions at Lancaster Teaching Hospitals NHS Foundation Trust

Lancashire Teaching Hospitals NHS Foundation Trust

Introduction
In 2010/11 alcohol related harm cost the NHS in Lancaster £141.92 million, with Preston having the highest rate of hospital admissions for alcohol related in this North West. At that time there was no alcohol liaison team within Lancaster Teaching Hospitals. In view of this, in April 2013, the Hospital Alcohol Liaison Team was formed in our unit to advise and support patients on stopping drinking and identify areas where practice might be improved.

Methods
We retrospectively identified inpatient colonoscopies per- formed at our hospital from January 2013 to January 2014 using a referrals logbook held on the endoscopy unit. Data was extracted from electronic endoscopy reports (Unisoft) and pa- tient casenotes.

Results
Twenty two inpatients with a median age of 69 (range 47-94) underwent 24 colonoscopies during the study period. Six pro- cedures were performed on patients admitted electively to un- dergo inpatient bowel preparation due to comorbidities, and the remaining 16 were undertaken during acute admissions. Clinical indications for colonoscopy were as follows: 29% (7/24) anae- mia, 17% (4/24) rectal bleeding 21% (5/24) abnormal CT scan, 17% (4/24) altered bowel habit, 8% (2/24) melena with nega- tive OGD, and 4% (1/24) BD assessment. Overall, inadequately car- ried out colonoscopies were due to inadequate bowel preparation and 1 due to a sigmoid diverticular bleed. Bowel preparation was assessed as good or satisfactory in 71% (17/24). Even in patients admitted specifically for bowel prep one third (2/6) had poor prep although this did not prevent caecal intubation. Completion rate for patients admitted acutely was lower at 72% (13/18). Four patients had significant new pathology diagnosed: 1 rectal cancer, 1 proximal colorectal cancer, 2 diverticular colitis, and 1 diverticulitis. All of these abnormalities were visible on CT scan and 3 were in reach of a flexible sigmoidoscope.

Conclusion
The audit has confirmed that inpatient colonoscopy fails to reach BSG quality standards for completion rate and quality of bowel prep. For inpatients requiring lower GI investigation con- sideration should be given to alternative methods of investiga- tion such as CT scan or sigmoidoscopy, or else deferring colono- scopy until after discharge. While the current vetting process appears to ensure that inpatient colonoscopies are performed for valid indications it does not permit full assessment of patient comorbidities nor allow more detailed clinical advice to be given to referrals about alternative investigations.

References
1) PO Hendry et al, Colorectal Dis, 2007
A Pilot Study of Modified Single Balloon Enteroscopy Technique: Preliminary Results
Blackpool Victoria Hospital

Introduction
Single balloon enteroscopy (SBE) was first described by Japa- nese endoscopists in 2007. The technique of SBE has been standard- ized by Japanese Enteroscope Insertion Technique Study Group. This involves use of fluoroscopy, general anaesthesia and frequent change of patient position, which initially limited its use. To address this, many modifications were introduced. However, the use of SBE in the UK is limited due to lack of training opportunities.

Aims
To assess the technical and clinical outcomes of modified SBE technique.

Material and Methods
In a 12 month period, 25 patients were admitted to Blackpool Victoria hospital. Departmental approval was taken for adopting this technique. Informed consent was obtained. Prospectively maintained database was
We collected data on 29 patients (mean age, 70.9 years; 69% male) with BE and early neoplasia (28% with intramucosal cancer, 5% with HGD, 17% with LGD). Patients were treated at a tertiary hospital in the United Kingdom from September 2011 to December 2013. Following diagnosis of the lesion in our specialist multidisciplinary meeting, these patients underwent EMR, ESD or hybrid procedure. Outcomes such as complete endoscopic response and complications from EMR, ESD or hybrid EMR/ESD were assessed.

Results
Eighteen patients (62%) underwent EMR, 9 patients (31%) underwent ESD and 2 patients (7%) underwent hybrid EMR/ESD procedures. Median follow-up duration was 16 months (range 1 to 26 months). Median size of the lesion was 2 cm (range 0.4 to 3 cm).

Out of the 18 EMR cohort patients, 14 patients (77%) who had EMR achieved a complete endoscopic response. One patient required endoscopic re-treatment, which was successful. Oesophagectomy was required in 2 patients (11%) after submucosal tumour invasion was detected on histology. One patient underwent radiotherapy following detection of submucosal tumour invasion as deemed unfit for curative surgery.

Overall, 14 patients (48%) underwent radiofrequency ablation of the remaining Barrett's segment following their initial endoscopic resection of the lesion. Metachronous lesions were detected in 4 patients (14%) during follow-up, all of whom underwent re-EMR with complete endoscopic resection.

Except one minor bleeding there were no other major complications in this cohort of patients.

Conclusions:
Our study has shown that EMR, ESD or combination of both, are effective methods for removing nodular lesions and both demonstrate an excellent safety profile. Coupled with radiological and histopathological accuracy of endoscopic therapy, early oesophageal cancer in contrast with BSG guidelines. We recommend consideration of FNA for suspicious lymph nodes where possible, when all morphological criteria are not fulfilled.

References
1. SR Puli et al, World J Gastroenterol 2008

Outcome of Endoscopic Mucosal Resection and Endoscopic Submucosal Dissection of Dysplastic Barrett’s Oesophagus and Early Oesophageal Adenocarcinoma

Salford Royal Hospital

Background and Aims
Endoscopic mucosal resection (EMR) and endoscopic submucosal dissection (ESD) are recent modalities, being used to treat high-grade dysplastic (HGD) Barrett’s oesophagus (BE) or intramucosal cancer. The aim of our study is to analyse outcomes from a prospectively collected database following EMR or ESD in the background of Barrett’s in a large tertiary teaching hospital.

Methods
We collected data on 29 patients (mean age, 70.9 years; 69% male) with BE and early neoplasia (28% with intramucosal cancer, 5% with HGD, 17% with LGD). Patients were treated at a tertiary hospital in the United Kingdom from September 2011 to December 2013. Following diagnosis of the lesion in our specialist multidisciplinary meeting, these patients underwent EMR, ESD or hybrid procedure. Outcomes such as complete endoscopic response and complications from EMR, ESD or hybrid EMR/ESD were assessed.

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1. SR Puli et al, World J Gastroenterol 2008

Accuracy of Standard 7.5-10MHz Endoscopic Ultrasound for Locoregional Staging of Oesophageal Malignancies - A Local Experience

Introduction
Endoscopic Ultrasound (EUS) is considered as a standard for staging of oesophageal cancer. Several systematic reviews have shown a wide variation with the locoregional ‘T’ and ‘N’ staging accuracy of EUS. This could be due to multiple factors including variations in the frequency of the echodoppler (7.5-10MHz), operator experience, tumour related factors particularly non-traversibility and technique employed. Published literature in addition does not take into account the time lag between EUS procedure and resection due to adoption of neoadjuvant chemoradiotherapy.

Aim
To evaluate the accuracy of ‘T’ and ‘N’ staging of oesophageal cancer using standard 7.5-10MHz endoscopic ultrasound.

Material and Methods
Study conducted at Blackpool Victoria hospital. Retrospective study, all patients in the local upper GI cancer database and Somerset Cancer registry for the Lancashire and South Cumbria cancer network were screened for the period between January 2008 and December 2013. Appropriate demographic, endoscopic and pathological outcomes data were collected. Departmental approval was obtained for this study.

Results
In total, 401 patients with oesophageal cancers were screened. Of the patients who had staging EUS by standard 7.5-10MHz endoscopic ultrasound, only in 47 patients final pathological staging was available (surgery 62% and ESD 18%). Age range of patients was 45-85 years, in 39 male and 8 female. Final ‘T’ staging confirmed adenocarcinoma in 38, squamous cell carcinoma in 7 and poorly differentiated in 3 patients. 28 patients had neoadjuvant chemotherapy. 10 patients had endoscopically non-traversable tumours. Overall accuracy of ‘T’ staging was sensitivity 80%, specificity 45.5%, PPV 61.5% and NPV 68%. Overall accuracy for ‘T’ staging was sensitivity 51% and specificity 43.9%, PPV 51% and NPV 78.2%. None of the patients had FN of the lymph nodes. Breakdown for each of the ‘T’ and ‘N’ stages are:

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<th>T stage</th>
<th>pT stage</th>
<th>EUS T stage</th>
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<tr>
<td>T1</td>
<td></td>
<td>12 (36%)</td>
</tr>
<tr>
<td>T2</td>
<td></td>
<td>7 (21%)</td>
</tr>
<tr>
<td>T3</td>
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<td>26 (73%)</td>
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<table>
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<tr>
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<th>pN stage</th>
<th>EUS N stage</th>
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<tbody>
<tr>
<td>N0</td>
<td></td>
<td>23 (71%)</td>
</tr>
<tr>
<td>N1</td>
<td></td>
<td>10 (30%)</td>
</tr>
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<td>N2</td>
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<td>0 (0%)</td>
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<tr>
<td>Overall</td>
<td>47</td>
<td>24 (51%)</td>
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Discussion and Conclusions
Our data is over a period of 6 years with four different operators but the same echodoppler. We show that EUS still has an acceptable overall diagnostic accuracy for locoregional staging. EUS shows an excellent T staging accuracy but T accuracy is impaired due to non-traversable of the tumour, we do not employ pre-EUS endoscopic dilatation. Overall N staging accuracy is less than published literature as we do not perform FNA of suspicious lymph nodes where possible, when all morphological criteria are not fulfilled.