Abstracts

Spring Meeting Ulster Society of Gastroenterology, 10th March 2011

Ramada Hotel, Belfast

President	**Dr A Varghese**
Secretary	**Dr P Lynch**
Treasurer	**Dr G Caddy**

PROGRAMME

Approved for 3 external CPD credits (RCP)

13:30	Registration & Tea / Coffee
14:00	Welcome
14:05	Free paper presentation
15.30	Coffee/ exhibition stand
15:50	Dysplasia
	Dr Maurice Loughrey
	Consultant Pathologist
	Royal Victoria Hospital
16:30	BSG Devolution
	Dr Miles Allison
	Consultant Gastroenterologist
	Royal Gwent Hospital
	Newport
17:10	Business meeting
18:00	Meeting close & USG Dinner

ORAL PRESENTATIONS

Prize Winning Presentation:

The proportion of oesophageal adenocarcinoma patients with prior Barrett's oesophagus: results from a large population based cohort

S Bhat[1], H Coleman[1], D McManus[2], A Gavin[3], L Murray[1], BT Johnston[4]

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Introduction: Barrett's oesophagus (BO) is a premalignant condition that predisposes to oesophageal adenocarcinoma (OAC). Few population based studies have determined the proportion of OAC patients who had a prior diagnosis of BO. The aim of this study was to estimate the proportion of OAC patients with a prior BO diagnosis.

Methods: The Northern Ireland Barrett's register (NIBR) is a large population based register of all patients in Northern Ireland (NI) diagnosed with BO between 1993 and 2005. Data on all patients diagnosed with OAC between 2003 and 2005 were obtained from the N. Ireland Cancer registry database, together with mortality and surgical resection data. These data were matched to the NIBR to identify OAC patients with a prior BO diagnosis.

Results: 487 patients were diagnosed with OAC in NI between 2003 and 2005. A total of 34 patients had a prior diagnosis of BO (6.9%). OAC patients with prior BO were significantly more likely to have undergone surgical resection than those without (41.2% vs 20.8%; p=0.006). Adjusted survival analysis showed that OAC patients with prior BO had a reduced risk of death compared to those with no prior BO.

Conclusion: The proportion of OAC patients with a prior diagnosis of BO is small. Survival analysis suggesting a survival advantage for those with prior BO is likely to be influenced by both lead time and length time bias. Current strategies for the detection of BO in the population identify only a small proportion of those that eventually progress to adenocarcinoma.

Diagnosing colorectal carcinoma: "red flag" or "red herring"?

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INTRODUCTION In 2000-2004 there were, on average, 938 new cases of colorectal cancer (CRC) diagnosed per annum in Northern Ireland, accounting for 13.9% of all cancers. The two week "red flag" referral system aims to detect 90% of patients with CRC for prompt treatment. The aim of this study is to examine the impact of the "red flag" referral system on identification of patients with CRC, time to treatment and stage of disease.

METHODS A random sample of 200 patients referred via the "red flag" system was identified from the local cancer patient tracker database. Data pertaining to demographics, time to hospital appointment, appropriateness of referral and diagnosis were collected. For patients identified with CRC, the stage of disease and time to first definitive treatment were also documented.

RESULTS Of the 200 patients, 56% were female. The age range was 27 - 93 years. Eighty three percent were seen within 14 days of referral. Referrals adhered to the guidelines in 45% of cases. There were 4 pancreatic cancers, 1 endometrial cancer, 1 ovarian cancer and 1 myelodysplasia diagnosed. Three patients were diagnosed with CRC (1.5%). Of these, 1 was palliative and the remaining 2 commenced definitive management within 6 days of decision to treat.

CONCLUSION The "red flag" referral system does not appear to be effective in identifying patients with CRC but did identify patients with other types of cancer. Less than half of the referrals adhered to

the guidelines. A review of this system should be undertaken.

Audit of Red Flag Endoscopy Referrals in Whiteabbey Hospital

C. Braniff, I. Carl, C Rodgers, P. Lynch, G. Jacob, S. Ali

Background The red flag referral system is designed to enable early cancer diagnosis. NICE and NICAN have published guidance on red flag symptoms which should be assessed urgently by a specialist within two weeks. Gastroenterologists use this guidance to decide which patients need urgent endoscopy.

Aim To audit the red flag endoscopy referral system, assessing timeliness, appropriateness and outcomes.

Methods A list of all patients referred for red flag endoscopy in the period 2009-2010 was compiled using the hospital coding system. 100 patients from this list were selected randomly.

An audit form was completed recording each patient's details, symptoms, dates of referral and procedures, along with endoscopic findings.

Results The patients included 61 women and 39 men. Each group had an average age of 63 years. 65 patients were referred as red flag or urgent by their GP, with 35 patients upgraded by consultant.

Average waiting times:

OGD	24 days
Colonoscopy	27 days
OGD & colonoscopy (double)	34 days
Flexible sigmoidoscopy	20 days

4% of patients were diagnosed with cancer.

Cancer yields per procedure were:

OGD	1.8%
Colonoscopy	5%
Sigmoidoscopy	0%

79.8% of procedures performed as red flag met with criteria.

Conclusions In this audit the cancer yield per procedure was low and waiting times too long. The majority of procedures performed as red flag met with NICE/NICAN criteria.

Assessment of Bone Mineral Density and its Management at a General Liver Clinic

Dr Jonathan Cash, Dr Gavin Mercer-Smith (SHO) Dr Nick Kelly (supervising SpR) Dr Neil McDougall

Liver Unit Royal Victoria Hospital Belfast

Background – Osteoporosis is a well recognised complication of liver disease and is associated with significant morbidity through fractures resulting in pain, deformity and immobility. Cirrhotic patients, those with jaundice due to chronic cholestasis and those with general liver disease and other risk factors are all at risk of bone thinning.

Aims - To assess bone health surveillance in patients with liver disease with or without osteoporotic risk factors.

Methods - Data has been collected retrospectively from the records of 10 consecutive cirrhosis, 10 cholestasis and 10 general liver disease patients respectively attending a hepatology outpatient clinic at a regional centre. Local bone mineral density (BMD) scanner records, lab and radiology databases were searched. Results were compared to the British Society of Gastroenterology guidelines.

Results – Overall 19 of the patients required bone surveillance but only 6 (31.6%) patients received BMD scanning. 2 (20%) patients were treated with calcium and vitamin D3 as required. No patients with T score > -2.5 had BMD scan repeated at 2 years. Of the 6 confirmed osteoporotic patients, 5 (83.3%) had testing of thyroid function, 6 (100%) bone profile, 1 (16.7%) oestriadol/FSH/LH, none testosterone/SHBG ratio and 1 underwent lumbar/thoracic x-ray. One hypogonadal osteoporotic patient was not prescribed hormone replacement. 2 (33%) eugonadal osteoporotic patients were treated with bisphosphonate, calcitriol or calcitonin.

Interpretation – There is an insufficient level of surveillance, investigation and treatment of bone health in liver disease patients highlighting the need for greater compliance with recent guidelines to provide optimal care.

Gastrointestinal Pathology After Streptococcus Bovis Bacteraemia - Long-Term Outcomes

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Departments of Colorectal Surgery [1] and Microbiology [2], Royal Victoria Hospital, Grosvenor Road, Belfast and School of Life and Health Sciences [3], University of Ulster, Northern Ireland.

Background: Streptococcus bovis, a non-enterococcal group D streptococcus, is associated with colorectal carcinoma (CRC) and hepatic dysfunction. This study assessed the implications of *S. bovis* bacteraemia on long-term gastrointestinal pathology.

Methods: A retrospective cohort study of patients with *S. bovis* bacteraemia between January 2000 and March 2009 was performed in the Belfast Trust. Clinical records were reviewed for data regarding demographics, medical co-morbidities, clinical presentation, investigations, and surgical interventions. Follow-up general practitioner questionnaires were also used to ascertain final clinical outcomes.

Results: 61 positive *S. bovis* blood cultures from 42 patients were included (M=25, mean age 67.1, range 44-88 years and F=18, mean age 67.6, range 0.5-90 years). 33 patients had one positive *S. bovis* blood culture; 10 had more than one positive blood culture. Five patients had a previous diagnosis of a colorectal lesion prior to their bacteraemia (CRC=4, adenoma=1). Thirteen of the remaining 38 patients underwent colonoscopy on their index admission where 3 CRCs and 7 adenomas were diagnosed. Of the remaining 25 patients, only 1 colorectal carcinoma was detected in a subsequent admission. Although colonoscopic investigation correlated with a diagnosis of CRC, Kaplan Meier survival analysis demonstrated no significant difference in patient outcomes for patients who did and did not undergo colonoscopy (log-rank, p=0.16).

Conclusion: Gastrointestinal pathology was detected in 76.9% (10/13) of all patients who underwent index admission colonoscopy. Index admission colonoscopy is recommended for all patient

admitted with *S. bovis* bacteraemia, although there may be no long-term survival benefit. Patients who have had a normal colonoscopy do not require further colonic investigation in the absence of symptoms.

Audit of Hepatitis testing: Every penny counts!

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Introduction: Viral hepatitis screen is one of the important tests in the evaluation of abnormal Liver Function Tests (LFTs). It is common practice to perform a 'liver screen' which includes Hepatitis B and C serology in hospitalised patients with abnormal liver function tests.

Methods: We reviewed LFTs and Ultrasound Scans of patients who had hepatitis serology performed between January 2009 - January 2010 at Causeway Hospital laboratory, (catchment population ~ 100, 000). The initial LFTs (pre-hepatitis testing) were evaluated and a decision was made on appropriateness of testing based on pattern of LFTS (Obstructive, Hepatitic or Mixed) and imaging. The appropriateness of testing was evaluated based on biochemical and radiological imaging.

Results: In total, 116 patients were tested for Hepatitis B and C. 11 patients were tested twice during the same admission. No patients tested positive for hepatitis B. Two patients were found to have antibodies against Hep C, but were PCR negative. Reasons for inappropriate testing included: obstructive LFTs, (n=28), no baseline LFTs(n=6), normal LFTs (n=20), rapidly improving LFTs (n=4), dilated CBD (n=5) and liver metastasis(n=5).

Discussion: The laboratory cost for hepatitis serology testing is £16, excluding consumables, labour and transportation. Based on this study £1264 laboratory costs and considerable inconvenience and expense at ward level could have been saved. Approximately £1m could be saved nationally (excluding primary care testing) by appropriate requesting of hepatitis serology

Laparoscopic resection of Gastric gastro-intestinal stromal tumours (GIST) is safe and effective

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Introduction Gastric Gastrointestinal Stromal Tumours (GIST's) are uncommon mesenchymal tumours of intermediate aggression. Laparoscopic resection is an attractive option as local resection without lymphadenectomy is the treatment of choice. This study reviews the results of patients undergoing laparoscopic resection of gastric GIST's in our institution.

Method A retrospective review was undertaken of all patients undergoing laparoscopic GIST resection at our institution. Information was obtained from theatre records, pathology reports and case notes.

Results All patients were discussed at a multidisciplinary team [MDT] meeting to develop a treatment strategy. One patient underwent neo-adjuvant imatinib therapy to render a large oesophago-gastric junction GIST amenable to resection. Twelve laparoscopic GIST excisions were undertaken on 11 patients. Mean age was 60.2 years (38-79, median 66); ASA grade I (3), grade II (7), grade III (2). Mean operating time was 87 minutes (55-121, median 83). Post-operative stay was 3.2 days (2-6, median 3). No patients required conversion to open surgery. One patient required a laparotomy to treat a reactionary haemorrhage and another suffered a port site infection. There were no mortalities. Mean tumour diameter was 3.8cm (2.4-5) and 11 tumours were classed as low risk using the Fletcher criteria, 1 was intermediate. Pathological margins were clear in all cases. C-Kit staining was positive in all cases. At mean follow-up of 23.6 months (4.5-42.5, median 21.7), one patient had a further GIST discovered incidentally, which was excised laparoscopically without complication.

Conclusion Laparoscopic resection of gastric GISTs is safe and effective in a specialist unit.

Magnetic endoscopic imager reduces colonoscopic procedure time

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Introduction: Colonoscopy using a magnetic endoscope imaging (MEI) is commonly employed as part of endoscopic training. It provides a 3 dimensional, real time view of endoscopic position which assists in loop resolution. We assessed whether MEI improved colonoscopic performance.

Method: We reviewed 346 colonoscopies performed across two sites over a 7 month period. 152 in Antrim Hospital (ANT) and 194 in Whiteabbey Hospital (WHA). Colonoscopies had to be either performed or supervised by one of two consultants who performed endoscopy in both sites. The MEI was available in WHA but not ANT. We compared procedure time, terminal ileal (TI)/caecal intubation, sedation/analgesia, polyp detection and comfort score (1-5) across the two sites.

Results:

		ANT	WHA	p
Mean procedure time (mins)		30	25	0.02
Mean comfort scores		1.68	1.55	0.19
Intubation (%)	TI	80	82	0.58
	Caecal	93	95	0.41
Polyp/tumour detection (%)	Without trainee	22	34	0.05
	With trainee	34	40	0.05

Conclusion: The use of MEI reduces procedure time on average by 5 minutes. Although not statistically significant there did appear to be a trend that it also improved comfort scores. Not surprisingly the level of discomfort was highest in colonoscopies where the trainer had to take over from the trainee. Interestingly polyp detection appears to be higher when trainees are present.