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- Gastroenterology Training in the District General Hospital
- Needle Aspiration Technique
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¹. Vaira D et al. Accuracy of a new ultrafast rapid urease test to diagnose Helicobacter pylori infection in 1000 consecutive dyspeptic patients. *Aliment Pharmacol Ther* 2010; 31, 331–338
It is no secret that the NHS is in a continuous state of flux. Changes are occurring at every level in order to improve patient care and experience. Emphasis is on reduction of waiting times, but with an ever-increasing population of patients with chronic health issues who require regular follow up, how is this to be achieved?

This issue of Gastroenterology Today contains a number of posters from the 2014 BSG. Those selected for the current edition highlight some of the challenges faced both in terms of quality and cost of patient care to the NHS. Leading on from this, others demonstrate the magnitude of work that has been undertaken across a number of Trusts in developing services to combat waiting times, reduce cost and to improve effectiveness and efficiency of patient care.

The scene is set in the articles illustrating the burden of chronic gastroenterological diseases such as IBD, IBS and alcoholic liver disease on the NHS in terms of both monetary cost and use of resources.

From there other work demonstrates development of services such as pharmacist, dietician and nurse led clinics, an online management system for IBD patients and even an app to help clinicians in the management of polyposis syndromes.

The use of the biomarker faecal calprotectin has been shown to give clinicians the confidence to diagnose functional bowel symptoms and reduce referrals for unnecessary colonoscopies. The use of rifaximin is shown to reduce episodes of hepatic encephalopathy and its related in-patient care costs. Both examples of further cost savings in a chronically squeezed NHS.

And so, here we have our patient-centred, ever improving for our patients, NHS. But what of the healthcare workers? Is there room for improvement of our working lives?

The first paper in this edition demonstrates just how challenging the life of a gastroenterology trainee can be. An ever-increasing workload of gastrointestinal and liver patients, coupled with commitments to the GIM rota stretch services and cause loss in endoscopy training opportunities.

I hope this edition of Gastroenterology today serves to highlight many of the challenges we face in today’s NHS and impress on you some of the changes which are occurring already in order to remedy this. It is only with dedicated and effective staff across all NHS disciplines that improvements such as these can occur.

“I hope this edition of Gastroenterology today serves to highlight many of the challenges we face in today’s NHS and impress on you some of the changes which are occurring already in order to remedy this. It is only with dedicated and effective staff across all NHS disciplines that improvements such as these can occur.”
GASTROENTEROLOGY TRAINING IN A DISTRICT GENERAL HOSPITAL: A REGISTRAR’S PERSPECTIVE

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Abstract

Introduction

The European Working Time Directive (EWTD) has made it increasingly difficult to get Gastroenterology training within the specified working hours with increasing General medicine (GIM) demands. We aim to quantify the impact of this on Gastroenterology training and the Gastroenterology referral service at our hospital.

Methods

Data for Gastroenterology referrals was collected from November 2010 to September 2011 and analysed. The average number of weekly referrals and standard rota details were used to analyse the impact of these activities for the year.

Results

515 referrals were seen over a period of 11 months. On average, 12 referrals were seen per week resulting in a total of 4 hours of extra work.

In a year of 260 working days, 35 days were spent on-call for GIM and 21 for night on-calls. Due to EWTD restrictions, 28 and 32 days were lost on compensatory and annual leave respectively.

Discussion

Only 6 sessions per week were spent as a Gastroenterology trainee. More time in GIM hinders endoscopy training and leaves referrals to be seen after working hours demonstrating the strains of modern rotas on endoscopy training and ability to see referrals. We suggest appropriate resourcing of the inpatient gastroenterology referral service.

Short Introduction

The European Working Time Directive (EWTD) has made it increasingly difficult to get Gastroenterology training within the specified working hours with increasing General medicine demands. We have performed a retrospective survey to quantify its impact on Gastroenterology training.

Key phrases

Impact of the European working time directive (EWTD) on Gastroenterology training
Impact of the European working time directive (EWTD) on endoscopy training
The role of Gastroenterology in General medicine
Gastroenterology referral service at a district general hospital
Changing rotas and increasing compensatory leave

Introduction

Gastrointestinal disorders account for 12% of the 5.2 million emergency medical admissions during 2009-10 (Department of Health, 2010). The Gastroenterology workload continues to rise in both the outpatient and inpatient setting as the number of cases with alcoholic liver disease and gastrointestinal cancers increase in an ever ageing population (Royal College of Physicians, 2011). The ‘acuteness’ of medical admissions as quoted by the Royal College of Physicians (RCP) has led to a reorganisation of the workload for a Gastroenterologist with an emphasis to provide more time for referrals (Royal College of Physicians, 2011).

With the RCP recommendation for 7 day Consultant cover in acute medicine, provision of a specialist referral service for inpatients has become increasingly difficult. Many hospitals will have specialist nurses in inflammatory bowel disease, viral hepatitis, nutrition and endoscopy which can ease this pressure although this does not represent all units.

A Specialist Registrar (SpR) balances service provision with training. In a normal working week, a Gastroenterology SpR would be expected to participate in two Consultant ward rounds, lead one or two SpR ward rounds, attend the outpatient clinics twice and attend at least one or two training endoscopy list. General medical (GIM) on-calls provide a valuable learning opportunity but may impact on specialist training. The introduction of acute medical units and twilight shifts has improved patient care with more decision making at senior level. However, this requires more Registrars on the medical rota at a higher on-call frequency. Often there will be two or three Registrars on-call simultaneously which reduces the time for training in their specialty.

A SpRs experience in a district general hospital can be different to that of a SpR in a teaching hospital where the workforce is generally larger with
more SpRs, clinical fellows, research registrars and specialist nurses available. SpRs at tertiary care centres often do not participate in GIM on-calls allowing them to pursue specialist training. The pressures on training have become more of an issue with limits on working hours as a result of the European Working Time Directive (EWTD) and greater integration into the acute medical unit. This is more apparent in surgical and other interventional specialities (Blencowe, Parsons and Hollowood, 2011, NHS Medical Education England, 2010). These commitments in addition to unaccounted duties such as inpatient referrals has changed the working pattern for both SpRs and Consultants in Gastroenterology.

Croydon University Hospital is a busy outer London district general hospital serving a population of approximately 360,000 people. At the time of this survey, there were two fulltime Gastroenterology Consultants and one part time Consultant who did not participate in the GIM rota. In addition, there were two Associate Specialists and two SpRs. The British Society of Gastroenterology (BSG) recommends a requirement of 6.1 Gastroenterology Consultants per 250,000 population in the BSG workforce report of 2012 (Gordon and Romaya, 2012).^3^

**Aims**

Our aim was to audit and quantify the impact of the inpatient referral service at Croydon University Hospital. We also aimed to quantify GIM commitments on specialist gastroenterology training at our hospital.

**Methods**

This retrospective survey was conducted at Croydon University Hospital which has approximately 500 beds. Data was collected for 11 months by two SpRs between November 2010 and October 2011. Referral activity was recorded prospectively from a designated gastroenterology referral bleep which was used by other firms to refer patients and discuss gastroscopies for acute gastrointestinal bleeds. Gastrointestinal bleeds were not included in the data collection. Collected data included demographics, nature of the clinical problem, a proposed management plan and whether a Consultant review was undertaken or not. All ward referrals were seen within 24 hours. We assumed that an average duration of 20 minutes was required to see each referral. This included a brief history, examination, review of the relevant medical record, and documentation of a proposed management plan. Time spent to see referrals for follow-up, either independently or with a Consultant was not included. We stratified the number the referrals by the nature of the clinical problem to produce a breakdown of gastroenterology referrals for the year. We calculated the total time taken to provide this service on a weekly basis by multiplying the number of referrals per week by our assumption of 20 minutes per referral.

We also analysed the GIM Medical SpR on-call rota and the weekly duties for a gastroenterology SpR for a period of 11 months. A calculation of the total amount of annual leave, compensatory leave and on-call duties was factored in to create an approximate weekly timetable for the year. We did this by dividing the number of working days in a year by the number of days spent in specialty training multiplied by 5 to give a proportion of an average working week. This calculation does not account for study leave, some of which are mandatory training days or clinical governance half days. Endoscopic training activity was obtained from the JAG (Joint Association of Gastroenterology) endoscopy training system (JETS) by each training registrar.

**Results**

A total of 515 referrals were seen over the 11 months period with a mean age of 60 years (range 14-98). There were 113 (22%) patients over the age of 80 years who were categorised as elderly care referrals. There were 276 (54%) patients aged between 60 and 89 years. Women accounted for 279 (54%) referrals.

The commonest reason for referral was liver disease (20.8%, n=107), followed by inflammatory bowel disease (IBD) (15.1%, n=78), hepatobiliary (HPB) and pancreatic disease (13.0%, n=67), endoscopic retrograde cholangiopancreatography (ERCP) (13.0%, n=67), upper gastrointestinal (UGI) conditions (12.2%, n=63), lower gastrointestinal conditions (LGI) (9.3%, n=48), insertion of percutaneous endoscopic gastrostomy (PEG) tubes (8.3%, n=43) and other miscellaneous conditions (8.2%, n=42) (figure 1). Of the total referrals, 6.8% (n=35) had alcohol related problems, 23% (n=8) of whom had a severe alcoholic hepatitis (Maddrey discriminant function >32). 26.9% (n=21) of patients with inflammatory bowel disease had an acute severe ulcerative colitis. Both groups of patients require considerable clinical input from a gastroenterologist.

On average, 12 referrals were seen per week resulting in an additional 4 hours of clinical work in a standard working week. The majority of the referrals were discussed with a Consultant although only 57% were reviewed by a Consultant Gastroenterologist. Referrals were predominantly spread throughout the working week with a greater frequency seen during the middle of the week (figure 2).

Our analysis of the GIM rota revealed that there were 15 registrars on the on-call rota during the period of analysis. A 15 week rolling rota had been created with two registrars on call for each day. This included a main SpR and a ‘booster or twilight’ SpR who assisted with the take from the afternoon. A similar pattern followed on weekends with two registrars on-call.

We calculated that in a year with 260 working days (not including weekends), 35 working days were spent on-call for GIM with a further 21 days on night duties. As a result, 28 days of compensatory leave was given during the year to maintain compliance with EWTD. With the addition of 32 days of annual leave only 144 working days are left. Therefore only 2.8 working days a week or 60% of a registrar’s time is spent in specialty training, with the rest being devoted to GIM on-call or time away (figure 3).

We calculated that only 43% of endoscopy training lists were attended as a result and the majority of endoscopy training was on non-training lists. This was based on the information obtained from the electronic endoscopy training records (JETS) website for both registrars and compared to the potential number of training lists available during the period.
Discussion

Main findings
This survey quantifies the inpatient referral service of a district general hospital and offers a breakdown of the categories of conditions seen. Our results suggest that 4 hours is required per week to maintain a gastroenterology inpatient referral service, which is unaccounted for time for both gastroenterology registrars and consultants.

Attempts to maintain senior cover on the wards and have 2 Registrars covering the medical take has led to a greater amount of time dedicated to cover GIM commitments. This in turn has led to more compensatory leave to conform to the 48 hour working week as required by the EWTD. Our results suggest that only 60% of the working week of a gastroenterology registrar is spent in specialist gastroenterology training. This calculation does not account for study leave, some of which are mandatory training days or clinical governance half days which would lead to a further loss of training time.

Changes in hospital practice and rota patterns
In our hospital, Gastroenterology Consultants were required to ‘post-take’ every patient admitted to the Gastroenterology ward despite patients having been seen by the Acute Medical Consultant within 12 hours of admission. With the provision of a ‘consultant ward round’ for all new patients every day, endoscopy lists and outpatient clinics had to be cut to allow for this activity. Due to the large proportion of patients admitted to the Gastroenterology ward being general medical patients, gastroenterology patients were often seen as ward referrals, defeating the point of specialist ward based care. As a consequence, Gastroenterology consultants were undertaking more reviews of inpatient referrals and largely doing it without a registrar who is often absent on-call or on compensatory leave.

With on-calls, compensatory leave and annual leave, registrars are not participating in their timetabled activity for a potential 116 days out of a possible 260 working days. This leads to the loss of endoscopy training and valuable outpatient clinic time. Even when registrars are available, they are often called to the wards for advice on sick patients. Referrals are usually seen out of hours with no designated time available during the week. This is complicated further by having to provide prospective cover for colleague absence, leave and on-calls.

This study highlights the difficulties of providing an effective gastroenterology referral service with the constraints of current GIM rotas and the EWTD. A large proportion of training and endoscopy time is lost to the requirements of GIM. The variety of referrals seen highlights the wealth of clinical experience and advantages gained (table 1) from ward reviews but the majority is done out of hours as this is not included in the SpR job plan in many centres. Some Registrars will use their research/audit/administrative work sessions to see the gastroenterology referrals thus putting pressure on these mandatory activities as recommended by the curriculum. Due to the flexibility required in promptly seeing ward referrals, it is difficult to incorporate this activity in the online job plans for Consultants. The current initiative taken by the Royal College of Physicians for a Consultant delivered service may impact further on already stretched Consultant job plans (Medical Workforce Policy, RCP, accessed 2013).

Table 1: Summary of advantages and disadvantages of current activity for SpR in Gastroenterology.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Good GIM training</td>
<td>• Extra hours beyond EWTD</td>
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<tr>
<td>• Large variety of referrals</td>
<td>• Loss of training time</td>
</tr>
<tr>
<td>• Patient-centred senior approach</td>
<td>o Endoscopy</td>
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<td></td>
<td>o Specialist GI</td>
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<tr>
<td></td>
<td>• Non timetabled Consultant activity</td>
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<td></td>
<td>• Large amount of time away on compensatory leave</td>
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<td></td>
<td>• Lack of continuity of care</td>
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Limitations
One of the limitations of this retrospective study is that it is based on the experience of two training registrars at a particularly busy district general hospital with only two full time Consultants. We also accept that not all rota patterns are the same. However, it highlights the impact of referrals, GIM on-call and compensatory leave on both registrar training and Consultant job plans. The time taken to see referred patients is an estimate and does not include reviews or time taken to talk to families prior to performing therapeutic endoscopic procedures. However, we believe that the experience and limitations at other District General Hospitals may reflect the findings of this study.

Conclusions
We suggest appropriate resourcing of the service with greater integration between specialist training and the GIM rota. As in some other medical specialities, it may be prudent to allow SpRs to be part of GIM on-call rota for the initial 3 years of their training with the last 2 years being dedicated to training in Gastroenterology and Endoscopy. It is also our suggestion that these factors should be taken into account when deciding on the length of training, workforce planning and Consultant expansion in the future. There needs to be a debate on the job commitments of Consultants in interventional specialties like Gastroenterology as the time taken up by specialist duties limits their involvement in other areas.

Declaration of Conflicting Interests
None declared

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors

References


Figure Legends
Figure 1: Percentage of referral seen during the study period by category

Figure 2: Percentage of referral seen by day of week (online only)

Figure 3: Indication of the proportion of the time spent by GI trainees by each activity during a calendar year

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We present a case series of three cases of pneumatosis cystoides intestinalis (PCI) with varied presentations. Colonic mucosal pneumocystoides in the first two patients was successfully diagnosed and managed with endoscopic needle aspiration of mucosal blebs resulting in a sustained symptomatic response whilst serosal disease required a laparoscopy.

A 63 year old male and a 74 year old female presented separately with similar complaints of longstanding constipation, bloating, urgency, and left sided abdominal pain. Routine colonoscopy revealed large mucosal air filled cysts in the sigmoid colon and rectum (Fig-1 & 2). An injection needle was used to aspirate and completely deflate the mucosal blebs confirming the clinical suspicion of PCI (Fig 3). Both patients later went on to have a CT scan of their abdomen and pelvis which were normal. Mucosal biopsies from the blebs confirmed giant cells in keeping with PCI. The urgency, bloating, constipation, and abdominal pain all improved significantly following aspiration and the clinical benefit was sustained at 3 months clinic review. Chronic airway disease may have been a contributory factor in one patient. Incidentally although both patients were taking clopidogrel at the time of diagnosis, we believe is unlikely to be of any clinical significance.

Another 74 year old male presented with recurrent post-prandial abdominal pain. His past history included a previously confirmed diagnosis of jejunal diverticulosis and chronic pneumoperitoneum noted on two CT scans done for similar presentation 2 years earlier. The chronic pneumoperitoneum was considered to be due to his jejunal diverticulosis. Diagnostic laparoscopy in view of worsening symptoms showed multiple serosal air filled cysts in the small intestine, mesentery and liver surface confirming a diagnosis of serosal PCI (Fig 4).
PCI, first described in 1783 by Du Vernoi, is characterised by air filled cysts in the bowel wall and mesentery usually seen in the vast majority of patients incidentally on abdominal CT. Clinical symptoms depend on the location and size of cysts. Colonic mucosal cystoides may be asymptomatic (Rt Colon), or cause constipation, abdominal pain, and urgency (Lt Colon) like in our first two cases. Serosal disease may present with pneumoperitoneum mimicking perforation1. Hyperbaric oxygen therapy is a recognised treatment option in symptomatic patients but not available widely. Surgery for pneumoperitoneum from serosal blebs or obstruction has also been described2.

Endoscopic needle aspiration of mucosal blebs is a safe, effective, and minimally invasive option for diagnosis and treatment in PCI. It should be considered as an alternative treatment option in those with symptomatic left-sided mucosal blebs in this rare condition.

References


**Antimicrobial susceptibility testing effectively eradicated *H. pylori***

In a region with high rates of multiple drug-resistant *Helicobacter pylori* infection, pretreatment antimicrobial susceptibility-guided therapy was more effective at *H. pylori* eradication than conventional clarithromycin-based triple therapy, according to recent study data.

Researchers from Korea completed a clinical study of 112 *H. pylori*-positive patients with gastric epithelial neoplasm from November 2011 to October 2012. One-half of the cohort was randomly assigned to antibiotics determined by antimicrobial susceptibility-guided therapy, and the other half received conventional triple therapy (proton pump inhibitor, amoxicillin and clarithromycin), both for 1 week. Patients in both groups for whom eradication failed received antibiotics determined by antimicrobial susceptibility tests as a second-line treatment.

After initial treatment, the intention-to-treat eradication rates were 94.7% (95% CI, 88.8-100) in the antimicrobial susceptibility-guided group and 71.9% (95% CI, 60.2-83.5) in the clarithromycin-based triple therapy group (*P* = .002), according to the study data. Per protocol eradication rates were 96.4% (95% CI, 91.5-100) and 73.2% (95% CI, 61.5-84.8), respectively (*P* = .001). In *H. pylori* resistant to clarithromycin, eradication failure with initial treatment was 0% in the susceptibility-guided therapy group compared with 80% (95% CI, 59.7-100) in the triple therapy group (*P* < .001).

The researchers concluded that “pretreatment antimicrobial susceptibility-guided therapy is more effective than clarithromycin-based triple therapy for *H. pylori* eradication in a region with high rates of multiple drug resistance.”

**Long noncoding RNA in gastric juice, plasma may be marker for gastric cancer**

Changes in long noncoding RNA-AA174084 levels in the tissues, gastric juice and plasma of patients with gastric cancer were associated with clinicopathological factors, suggesting utility as a biomarker for early screening and predicting prognoses, according to research data.

To determine the diagnostic and prognostic utility of plasma and gastric juice levels of AA174084 (AA) — a long noncoding RNA (lncRNA) found with abnormal expression in gastric cancer (GC) tissues in a previous study — researchers analyzed samples from three gastroenterology centers in China from February 2011 to November 2013. Total RNA was extracted from 860 patients and controls and measured using real-time reverse transcriptase-polymerase chain reaction analysis.

AA levels were down-regulated in 71% of 134 GC tissue samples compared with paired adjacent normal tissues (*P* < .001), with mean expression level 3.18 times greater in the normal samples. AA levels also were decreased in the GC samples and in 28 gastric dysplasia (GD) samples compared with 37 healthy gastric mucosa samples (*P* < .01 and *P* < .001, respectively). AA tissue levels negatively correlated with age (*P* = .031), Bormann type (*P* = .016) and perineural invasion (*P* = .032).

Plasma levels of AA decreased in 76% of 83 GC patients 15 days after surgery compared with 120 controls. 29 GD and 84 preoperative GC patients (*P* < .001), and correlated with lymphatic metastasis (*P* = .042) and invasion (*P* = .049). Gastric juice levels of AA were increased in patients with GC compared with levels in normal mucosa (NM) or patients with minimal gastritis, gastric ulcers and atrophic gastritis (AG; *P* < .001). Compared with patients with NM, benign lesions or AG, AA levels in the gastric juice of early GC patients also spiked (*P* < .001). Gastric juice levels also were associated with tumor size (*P* = .026), tumor stage (*P* = .034), Lauren type (*P* = .021) and gastric juice carcinoembryonic antigen levels (*P* = .039).

“LncRNA-AA potentially may play a role during GC development,” the researchers concluded. “The plasma AA level also has potential as a biomarker for prognosis evaluation, and the level of AA in gastric juice has potential use in the early diagnosis and differential diagnosis of GC.”

**Disclosure:** The researchers report no relevant financial disclosures.

**Dr Alenka Brooks scoops top prize for setting up Sheffield Women in Medicine network**

A DOCTOR specialising in disorders of the digestive system has scooped a top national prize for helping set up an inspiring network championing the need for more women to get top positions in medicine and academia.

Dr Alenka Brooks, a specialist registrar in gastroenterology at Sheffield Teaching Hospitals NHS Foundation Trust, played a lead role in setting up the Sheffield Women in Medicine network, which aims to combat the underrepresentation of women in top medical jobs.

More than half of medical students and 40 per cent of doctors are female – but fewer than 28 per cent of consultants are women.

Now Dr Alenka Brooks has been named a Personal, Fair and Diverse Champion by NHS Employers in recognition of the achievements she has made in making the NHS a more diverse workplace.

The network is run by junior and senior doctors at Sheffield Teaching Hospitals NHS Foundation Trust and academics from the University of Sheffield. Its inaugural meeting took place in February this year, attended by over 200 delegates, and supported by Miriam González Durántez, a partner at an international law firm and the figurehead behind the national Inspiring Women campaign which aims to increase the numbers of women in leading positions in society.

Dr Alenka Brooks, a specialist registrar in gastroenterology at Sheffield Teaching Hospitals NHS Foundation Trust, said:

The Sheffield Women in Medicine network aims to provide a positive forum through which female
professionals can learn through the experience of others, foster a change in culture through peer support and mentoring opportunities and by increasing the visibility and recognition of women in medicine by highlighting successes.

This award is great news for the Network, and will hopefully raise the profile of the work even further. The next event is to be held on the 21 October, between 6pm to 8.30pm, so we look forward to seeing you there.

Dr Alenka Brooks was one of four individuals selected for the award, which saw entries double from last year.

Professor Chris Ham CBE, chief executive of The King’s Fund will be speaking alongside Carol Culshaw, one of The Health Foundation’s leadership development consultants, at the next event on 21 October. These high profile keynote speakers will give the network an opportunity to hear from international experts on leadership development and the role coaching plays in this.

Which diet supplements pose a risk to your liver?

Thousands of Americans each year suffer liver injury from common drugs they take, but a growing percentage also experience liver damage from largely unregulated dietary supplements such as green tea extract used for weight loss. The American College of Gastroenterology released a new guideline last week warning physicians about the risks of supplements and how to advise about their use.

“We encourage patients to talk to their doctor about all medications, and herbal and dietary supplements should be no exception,” said Dr. Herbert Bonkovsky, a gastroenterologist with the Carolinas HealthCare System in Charlotte.

Damage from dietary supplements accounts for nearly 20 percent of drug-related liver injuries requiring hospital care, up from 7 percent a decade ago, the Drug-Induced Liver Injury Network says. The guideline lists the drugs and outcomes. We used propensity scoring to construct two cohorts that were similar in most respects, other than age.”

Abbott and colleagues identified 6,756 cases of nonemergent esophagectomies using records from the University HealthSystems Consortium Clinical Database/Resource Manager from 2009 to 2012. They compared outcomes (in-hospital mortality, length of stay, discharge disposition, readmission rate and cost) in age-stratified groups (aged 18 to 59 years, 60 to 69, 70 to 79, and 80 years and older).

The perioperative mortality rate was four times greater in patients aged 80 years and older compared with patients aged younger than 60 years (8% vs. 2.1%; P < .001). Comparing the same age groups showed longer median length of stay (12 vs. 10 days; P < .001), higher rate of discharge to rehabilitative care (43.9% vs. 6%; P < .001), higher median cost ($26,470 vs. $22,792; P < .001) and less frequent discharge to home (P < .001) in the older patients.

“By isolating age as an independent variable, we discovered that patients over the age of 80 undergoing esophagectomy were twice as likely to suffer perioperative mortality and require inpatient rehabilitation upon discharge,” Abbott said. “Furthermore, for patients over 80, perioperative mortality was over six-fold higher if esophagectomy was performed at a low volume center as compared to a high volume center. This study informs us that patients over 80 years old undergoing esophagectomy are at very high risk of preoperative mortality and are much more likely to require resource-intense long-term care. Lastly, by shifting the care of these patients to high-volume centers, many of these pitfalls can be mitigated.” – by Adam Leitnerberger

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**Esophagectomy-related mortality increased in older patients**

Increasing age affected outcomes, particularly mortality and discharge disposition, in patients who underwent esophagectomy, according to recent study data.

“As health care costs and resource utilization are increasingly scrutinized, it is important to identify risk factors and cohorts of patients who may not benefit from complex interventions as much as other patients,” Daniel E. Abbott, MD, department of surgery, University of Cincinnati, told Healio.com/Gastroenterology. “Esophagectomy, a morbid and complex operation for an aggressive malignancy, is a good intervention to study variability in patients and outcomes. We used propensity scoring to construct two cohorts that were similar in most respects, other than age.”

Abbott and colleagues identified 6,756 cases of nonemergent esophagectomies using records from the University HealthSystems Consortium Clinical Database/Resource Manager from 2009 to 2012. They compared outcomes (in-hospital mortality, length of stay, discharge disposition, readmission rate and cost) in age-stratified groups (aged 18 to 59 years, 60 to 69, 70 to 79, and 80 years and older).

The perioperative mortality rate was four times greater in patients aged 80 years and older compared with patients aged younger than 60 years (8% vs. 2.1%; P < .001). Comparing the same age groups showed longer median length of stay (12 vs. 10 days; P < .001), higher rate of discharge to rehabilitative care (43.9% vs. 6%; P < .001), higher median cost ($26,470 vs. $22,792; P < .001) and less frequent discharge to home (P < .001) in the older patients. Adjusting for severity of illness, race, sex and center volume showed similar results, with higher risk for mortality (RR=1.68; 95% CI, 1.2-2) in the 80 and older group, as well as higher likelihood of being discharged to rehabilitative care (RR=3.47; 95% CI, 2.33-5.16) compared with younger patients.

“By isolating age as an independent variable, we discovered that patients over the age of 80 undergoing esophagectomy were twice as likely to suffer perioperative mortality and require inpatient rehabilitation upon discharge,” Abbott said. “Furthermore, for patients over 80, perioperative mortality was over six-fold higher if esophagectomy was performed at a low volume center as compared to a high volume center. This study informs us that patients over 80 years old undergoing esophagectomy are at very high risk of preoperative mortality and are much more likely to require resource-intense long-term care. Lastly, by shifting the care of these patients to high-volume centers, many of these pitfalls can be mitigated.” – by Adam Leitnerberger
Dubai Hosted the Fourth Annual Takeda Regional Summit on the Latest Gastroenterology Research and Treatments

Over 200 experts and scientists from the region and around the world participated in the summit.
 Liver Patients: 
Appropriate Care in the Right Setting

Summary of presentations from the satellite symposium sponsored by Norgine Pharmaceuticals Ltd at the British Society of Gastroenterology Annual Meeting, 16–19 June 2014, Manchester, UK

Co-chairs: 
Dr Paul Richardson and Dr Stephen Ryder

Speakers: 
Dr Stephen Ryder, Dr Matthew Foxton and Dr Paul Richardson

Disclosure: The speakers received honoraria from Norgine Pharmaceuticals Ltd for participating in this symposium.

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Citation: TBC

Key points:

- Early detection and diagnosis of liver disease is necessary to prevent the development of cirrhosis and its associated complications, which can be facilitated through screening of at-risk groups and using biomarkers of fibrosis.
- Complications of cirrhosis, such as hepatic encephalopathy (HE), are associated with increased mortality and morbidity, and have a major impact on the quality of life of both patients and their carers.
- There are now opportunities in the community for the early detection and management of cirrhosis and its complications, particularly ascites and HE, thereby improving patient outcomes and reducing overall healthcare costs.
Early diagnosis of cirrhosis: what test, which patient?

Dr Stephen Ryder, Nottingham Digestive Diseases Centre and Biomedical Research Unit, UK

Liver disease is the only leading cause of morbidity and mortality in the UK to have increased in prevalence over the last 2–3 decades [1]. Although patients presenting with decompensated liver disease have a very poor prognosis, the course of liver disease in its early stages is slow and silent. For example, following hepatitis C virus (HCV) infection it may take 20–30 years for cirrhosis to develop and a further 10 years for symptoms to appear, but by the time a patient becomes symptomatic, life expectancy is drastically reduced (Figure 1) [2]. Indeed, approximately 50% of patients presenting with ascites – a common late-stage complication of liver disease – die within 2 years [3]. The challenge is therefore to detect and diagnose liver disease early, so that appropriate intervention can be initiated to prevent the development of cirrhosis and its associated late-stage complications.

In primary care, the detection of liver disease has included the use of liver function tests (LFTs), which are often undertaken as part of routine patient review for conditions such as diabetes and hypertension. However, Dr Ryder presented evidence from two studies – the Birmingham and Lambeth Liver Evaluation Testing Strategies (BALLETS) study [4] and the Abnormal Liver Function Investigations Evaluation (ALFIE) study [5] – illustrating that standard LFTs are poor predictors of liver disease, since they are unable to discriminate later development of disease. For example, in the ALFIE study, only about 1% of more than 95,000 patients who had LFTs in primary care went on to develop diagnosed liver disease over a median follow-up of 3.7 years [5]. When used in combination with predictive models based on other key demographic and medical data, such as the Algorithm for Liver Function Investigations (ALFI) [6], the utility of standard LFTs can be improved. However, in order to accurately identify patients at high risk of developing cirrhosis, Dr Ryder stressed that it is essential to employ a marker for fibrosis.

Options for the detection of fibrosis comprise serum fibrosis markers and tests of liver stiffness. Serum fibrosis markers include the aspartate aminotransferase/alanine aminotransferase (AST/ALT) ratio, which has been shown to have sensitivity for detecting cirrhosis of 31–56% and specificity of 90–100% [7]; also, the Enhanced Liver Fibrosis (ELF) test, which has demonstrated considerable diagnostic value for the prediction of cirrhosis and the staging of liver fibrosis [8]. Tests for liver stiffness include transient elastography (TE) using Fibroscan. This has been successfully used to screen for cirrhosis in the general population and to detect undiagnosed chronic liver disease in apparently healthy subjects [9]. Dr Ryder pointed out that TE has been least well validated for non-alcoholic fatty liver disease, which is likely to be the commonest indication for which it is required in primary care.

Dr Ryder went on to present results from a study conducted in Nottingham, in which non-invasive biomarkers were used in combination with TE to identify patients with liver disease in a community population [Ryder, personal communication]. This employed a three-step process: (1) identification of patients with risk factors for developing chronic liver disease (persistently raised ALT, type 2 diabetes and/or hazardous alcohol use); (2) simple biomarkers to identify which of these patients were at greatest risk of developing liver disease (AST/ALT ratio >0.8 or BARD score ≥2); and (3) TE for patients testing positive for these biomarkers. Patients with a high TE threshold (≥8 KPA) were then referred for further hepatology testing. From a population of 12,368 patients, 1027 patients were identified as having a risk factor for liver disease, of whom 504 underwent biomarker testing and 378 underwent TE. Overall, 26.8% (88/336) of patients with both tests of liver tissue data acquisition had a high TE threshold requiring further hepatology testing and 11 new patients with definite cirrhosis were identified, representing a 2.4-fold increase in cirrhosis detection in the study population (Ryder, personal communication).

The Nottingham study therefore demonstrates that a non-invasive risk factor-based screening strategy can be successfully used for the early identification of patients with significant liver disease in the primary care setting. Such an approach requires careful resource planning and organisation; for example, to ensure that laboratories routinely report raised AST/ALT ratios and that TE testing is available in the community. However, by detecting liver disease early, this approach may help reduce the risk of patients progressing to cirrhosis and thereby avoid its devastating consequences.

Complications of cirrhosis: QoL impact on patients and their caregivers

Dr Matthew Foxton, Chelsea and Westminster Hospital and King’s College Hospital, London, UK

Patients with late-stage liver disease may suffer from a multitude of symptoms, including poor sleep, fatigue, malnutrition and diabetes, in addition to the major complications of cirrhosis – ascites, variceal bleeding and hepatic encephalopathy (HE) – all of which can have a significant impact on the quality of life (QoL) of patients and their caregivers.

The health-related QoL (HRQoL) of patients with cirrhosis can be assessed by a range of generic and disease-specific instruments [10], although there has been an increasing trend towards using patient-reported HRQoL measures. The importance of assessing HRQoL is underlined by the fact that HRQoL predicts mortality in patients with cirrhosis, independent of the severity of liver disease (Figure 2) [11].

Ascites is one of the primary complications of cirrhosis and is not only associated with a high risk of mortality [3], but also markedly affects patients’ QoL [12]. Ascites is also associated with the development of hyponatraemia, which can itself have a significant impact on patients’ QoL [13]. Treatment of ascites (for example, with paracentesis or a transjugular intrahepatic portosystemic shunt) can result in improvements in QoL [14]. Although variceal bleeding is another major and particularly lethal complication of cirrhosis [15], its impact on QoL is less obvious, since it is largely asymptomatic. By contrast, HE has been shown in multiple studies to have a major impact on QoL [16, 17]. Although HE is diagnosed according to West-Haven criteria as ‘minimal’ or stage I to IV, the term ‘minimal HE’ is somewhat misleading, since it is known to have a significant impact on patients’ QoL [17]. There has therefore been a move towards using the terms ‘covert HE’ for patients with West-Haven minimal or grade I HE and ‘overt HE’ for those with West-Haven grades II to IV HE [18].

Dr Foxton pointed out that HE can be difficult to recognise in clinical practice, illustrating this with the results of a study in which 71 patients who were seen by their regular clinician in a hepatology clinic went on to be assessed
for the presence of HE. Although none of the patients were considered by their clinician to have HE, further assessment revealed that 34% had overt HE and 48% had covert HE [19]. This might in part be explained by the results of a study into the impact of minimal HE on HRQoL (as measured using the Sickness Impact Profile), which revealed significant impairments across all domains except communication [17], suggesting that, in the setting of a short clinic visit, it may not be immediately apparent to the clinician that a patient has cognitive impairment, since their communication skills may appear normal. This underlines the need for proper assessment of HE in patients with liver disease, and the need to ask patients – and their carers (who are often best able to notice symptoms) – the right kinds of questions in order to recognise whether and how their QoL is being affected.

Diagnosis of covert HE is made on the basis of abnormal neuropsychometric test results in the presence of a normal mental state (as assessed using the Mini Mental State Examination). Covert HE is associated with a decreased probability of survival [20] and a high risk of progressing to overt HE [21]. It is also associated with an increased risk of driving accidents [22], poor sleep quality [23] and an increased likelihood of being unfit to work, particularly among manual workers [16]. Cognitive dysfunction in patients with cirrhosis has also been shown to significantly increase the incidence of falls, the risk of injury and the cost of emergency services and hospitalisation, compared with patients with cirrhosis who do not have cognitive dysfunction [24].

In addition to its effects on the lives of patients, HE has been shown to have a detrimental impact on the QoL of their caregivers. A study of >100 patients with HE and their caregivers found that 28% of caregivers had depression, 39% suffered from anxiety, and caregiver burden was associated with health and social impairments and feelings of entrapment, particularly in those married to patients with HE [25]. Importantly, HE was shown to significantly impact the lives of caregivers, who often experience a multitude of symptoms (including spontaneous bacterial peritonitis, variceal bleeding, chronic pain, patient depression and patient anxiety) [25].

Cirrhosis and its complications – in particular HE – are therefore not only associated with a poor prognosis but also severely impact the daily lives of both patients and their carers. Such findings underline the need for early detection of liver disease to help avoid these complications, and highlight the importance of strategies targeting the diagnosis, prevention and appropriate management of HE.

**Treatment in the community – great idea but who benefits?**

*Dr Paul Richardson, Royal Liverpool University Hospital, UK*

Dr Richardson emphasised that the primary drivers of the rapid increase in liver disease observed over recent years are alcohol and fat intake and HCV infection, and went on to focus on the need for an integrated approach to patient care to ensure that these public health challenges are addressed. This requires hepatologists to work more closely with general practitioners, drug and alcohol workers, and mental health staff, and to take a lead in organising pathways that can cope with the silent nature of liver disease. The need for integrated community care has been highlighted by the National Coalition on Care Coordination [26], which recommends that care systems become more attentive to the needs of service users, ensuring a package of care that improves their health and helps them navigate fragmented healthcare systems. At a time of intense financial pressure, this must be delivered in less costly environments [27].

Excessive alcohol consumption is a major preventable cause of premature mortality, alcohol-related deaths accounting for 1.4% of all deaths in England and Wales in 2012 [28]; alcohol is therefore the most pressing issue to address in the management and prevention of liver disease. Alcohol misuse is also associated with a high risk of alcohol-related brain damage [29]. The management of alcohol-related problems is particularly challenging, since they tend to coalesce with other social problems, such as poverty, domestic violence and drug abuse, underlining the need for a multifaceted approach to patient care. Integrated care pathways require the cooperation of many multidisciplinary teams, including primary care, acute hospital, specialist treatment and social care multidisciplinary teams; in essence, to amalgamate the ‘splendid work that is currently being done in splendid isolation’. A primary goal in tackling alcohol-related problems is to lower a patient’s drinking categorisation (‘alcohol-dependent’ → ‘high-risk drinking’ → ‘increasing-risk drinking’ → ‘low-risk drinking’ → ‘non-drinker’), since even a relatively modest reduction in the alcohol units consumed by an alcohol-dependent or high-risk drinker can result in significant health and social benefits. Another way in which alcohol-related problems can be addressed is to increase the utilisation of pharmacological treatments for alcohol dependency (e.g. acamprosate, naltrexone and possibly baclofen for patients with more advanced liver disease), as it is estimated that only 6–8% of individuals with alcohol dependency in the UK are currently receiving pharmacological treatment [30].

HCV is another important and potentially preventable cause of liver disease, since effective treatment options are now available [31]. Unfortunately, treatment rates are lowest in the most affected at-risk group – people who inject drugs – the main driver of the spread of HCV infection [31]. The effective management and treatment of HCV infection requires screening in the community and effective access to treatment services for some of the most marginalised groups in society. This requires integrated services and pathways to make it easier for patients to be reached and treated. In Liverpool, hepatologists are working with Clinical Commissioning Groups to build a business case for ‘hepatology hubs’ around the city, where patients can be seen, screened and treated in one place. Such an initiative not only requires multidisciplinary cooperation, but also the availability of TE facilities in the community and the training of nursing staff to become multifaceted hepatology nurses, capable of treating all aspects of alcohol and HCV-related issues.

The third main driver of liver disease – obesity – is particularly challenging, since the only way to address the problem is through education about the importance of exercise and a healthy diet. There is an increasing incidence of childhood obesity in the UK, with cases of significant fibrosis and even cirrhosis reported in this young age group. Dr Richardson stressed that ‘generic transformation’ could play a vital role in the future management of liver disease, through educating schoolchildren about the risks of alcohol, drugs and obesity.

Dr Richardson highlighted that there are opportunities to improve the early detection, management and treatment of liver disease in the community, thereby improving patient outcomes and QoL and reducing healthcare costs, particularly by decreasing the need for hospitalisation. In particular, there are now new opportunities to improve the management of complications of cirrhosis in the community, including paracentesis for ascites and the use of lactulose and, more recently, rifaximin-α to reduce the risk of HE recurrence. Community nurses can help educate patients and their carers about the signs to look out for which indicate that intervention is required, before the need for hospitalisation arises. Dr Richardson also stressed that there are opportunities to improve the end-of-life care for patients with liver disease in the community; hepatologists should be more prepared to discuss difficult end-of-life decisions with patients and their carers, so that their wishes can be respected, wherever possible.

Overall, the major aims of community hepatology are to help prevent the development of liver disease through effective public education and to improve its early identification and treatment, since such ‘upstream activity’ reduces costs and the need for complex interventions and improves patient outcomes (Figure 3). This requires hepatologists not only to change their practice (i.e. where they do their work), but also to change their psychology, through a willingness to work with other service providers and to design, facilitate and oversee new pathways of care.

**Figure 3** Activity upstream reduces costs, reduces the need for complex interventions and improves outcomes

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**Figure 3** Activity upstream reduces costs, reduces the need for complex interventions and improves outcomes.
References


New Non-Endoscopic Cell Sampling Tool Appears To Detect Eosinophilic Esophagitis

by Ted Bosworth

Chicago - A cell sampling method that involves pulling a spongelike device up through the esophagus appears to be an effective diagnostic tool for eosinophilic esophagitis (EoE).

The device has been in development for several years for the diagnosis and monitoring of Barrett’s esophagus. Called Cytosponge, it may be at least as useful for detection and follow-up in patients with EoE, new research suggests.

“In our pilot study, [Cytosponge] detected a case of EoE missed with biopsy,” said David A. Katzka, MD, professor of medicine in the Division of Gastroenterology at Mayo Clinic, in Rochester, Minn. Dr. Katzka said the device was well tolerated and well accepted by patients, who generally preferred this method of evaluation to endoscopy. Dr. Katzka presented data on the device at Digestive Disease Week 2014 (abstract 56).

The Cytosponge comes as a gelatin pill on a string. The patient swallows the pill, the gelatin dissolves and the mildly abrasive sponge inside expands. The clinician pulls the sponge back up through the esophagus, collecting sufficient cells for a cytologic smear without causing significant injury or discomfort.

For a condition like EoE, which over the course of diagnosis and treatment may require multiple samples, the device has the potential to be easier and more cost-effective than endoscopic biopsy, according to Dr. Katzka, who has not yet performed cost-benefit analyses with this technique.

In the study, 20 patients with active EoE or a history of EoE were evaluated with the sponge method, followed by endoscopy and biopsy. Endoscopy provided a control for the diagnostic accuracy of the device and permitted clinicians to evaluate the esophagus for injury after withdrawing the sponge. The goal of the study was to evaluate the device for diagnostic accuracy, acceptability to patients and potential for complications.

On biopsy, 16 patients had more than 15 eosinophils per high-power field (HPF), which is a standard for the diagnosis of EoE. All of these patients had at least one eosinophil detected with the sponge and 10 had more than 15 HPF.

Four of the patients had more eosinophils detected with the sponge than with the biopsy, and one patient was positive for EoE after specimen collection with the sponge but had a negative biopsy. Overall, good correlation was found between the sponge and biopsy, according to Dr. Katzka. The correlation between the sponge and biopsy for peak extracellular eosinophil-derived neurotoxin staining was statistically significant ($P = 0.0054$).

Mucosal abrasion scores were mild and no complications were associated with the sponge, said Dr. Katzka, who said every patient preferred the device to endoscopy and biopsy.

The next step will be larger studies to confirm the accuracy and safety of the sponge, Dr. Katzka said. The device was developed by Rebecca C. Fitzgerald, MD, a consultant gastroenterologist at the University of Cambridge, in England, as a relatively simple tool to evaluate patients for Barrett’s. In EoE, Dr. Katzka suggested that more work is needed to confirm that the optimal diagnostic cutoffs for eosinophil counts have been identified, but he said he was encouraged by its clinical potential.

Evan Dellon, MD, MPH, associate professor of medicine and epidemiology at the University of North Carolina at Chapel Hill, said the multiple biopsies required to diagnose EoE and judge response to treatment are a burden for patients. Dr. Dellon said the sponge looks promising enough that he plans to participate in the next set of clinical studies with this device.

“If this is proven to be safe and accurate in larger studies, it could really change how we follow patients,” Dr. Dellon said. “Instead of requiring endoscopy, the sponge could simply be administered in an office-based setting, the sample sent to pathology and the results acted on without the patient having the expense or risk of another endoscopic procedure.”
Bad heartburn? You might have Barrett’s Oesophagus

The condition can lead to cancer, so it’s important to get it checked out.

GETTING HEARTBURN OR acid reflux occasionally is fairly normal – but some people find themselves chronically affected by these ailments.

Some of those people could also have a condition that can have an even more serious impact on their health.

Up to 10% of people with chronic heartburn could be at risk of developing the condition known as Barrett’s oesophagus – about 4-5 per cent of people with Barrett’s will go on to develop cancer.

What it is
The Irish Society of Gastroenterology wants more people to know about the condition, which is where the cells lining the lower part of the oesophagus undergo change as a result of constant acid reflux from the stomach.

Barrett’s is considered a pre-cancerous condition, and endoscopic screening for it and for early pre-malignant changes is generally recommended in all adults aged 50 and over who have a long history (over five -10 years) of heartburn.

What the experts say
Prof Dermot O’Toole is an upper GI consultant gastroenterologist at St James’s Hospital and a member of the Irish Society of Gastroenterologists. He’s a leading consultant and expert on Barrett’s oesophagus.

He spoke at the recent summer meeting held by the society, where the latest discoveries on Barrett’s were discussed.

Prof O’Toole pointed out that a lot of people get the odd bout of heartburn or reflux every now and again, and “this is normal”. It’s termed physiological reflux.

He pointed out that when changes are detected early, patients with Barrett’s can be entered into programmes where they are put under medical surveillance.

Keeping an eye on the condition
Under these programmes, they undergo an endoscopy every three to five years to monitor for any cancerous changes.

Prof O’Toole said that there may be an element of “overkill” in having everyone with the condition to have a scope, so it would be good to narrow down who would be most at risk of malignant cancer.

At the summer meeting, a number of free papers and research were presented that looked at the genetics of Barrett’s.

The experts were able to discuss whether genes may be useful in predicting patients who go on to experience malignant cancer with Barrett’s.

If work can be done in determining the patients with Barrett’s who are going to go on to eventually develop malignant cancer, this could mean targeting the screening at the at-risk group.

In the meantime, surveillance for all people with Barrett’s is still recommended.

Diagnosing patients
Some people who are diagnosed don’t have major symptoms of Barrett’s, but instead the condition is found when they have a scope for another reason.

“We are trying to better understand the genetics,” said Prof O’Toole, saying it may be helpful to look at disease modifying genes, and genes that show patients are predisposed to a more aggressive form of Barrett’s.

About 95% of patients with Barrett’s go on to die of unrelated causes.

Testing and treating Barrett’s
Currently, testing for Barrett’s involves a scope.

There is a new form of screening undergoing testing that sees the patient swallow a tablet on a string. Inside the tablet capsule is a small sponge.

After swallowing, the capsule dissolves and the sponge can be pulled back up, bringing with it some of the lining of the lower oesophagus.

This can then be analysed to make a diagnosis.

Treating cancer in Barrett’s patients also involves new technology. “If they go on to get early malignant changes or cancer, we now are capable of getting rid of that endoscopically,” said Prof O’Toole.

In the past, the treatment of early (‘non-invasive’) cancers in Barrett’s oesophagus was surgical removal of the oesophagus. These days we have minimally invasive procedures (endoscopic based) that can eradicate both pre-cancerous and early cancerous cells completely.

Weight and Barrett’s oesophagus
Weight plays a role in Barrett’s – as it does in many other physical conditions.

Reflux is common in Ireland, “especially in the Irish population where obesity is prevalent”, said Professor O’Toole. “There is a definite link between reflux and obesity.”

“We have a high degree of prevalence in our society of obesity or overweight,” he said. The national registry shows that 70 per cent of patients with Barrett’s are either overweight or obese.

Prof O’Toole encourages patients to get down to a normal body weight and make sure they eat quality fruit and fibre. He pointed out that vegetables and fruit have anti-oxidants, so help to introduce protective elements into people’s diets.

Patients are given treatments to suppress their acid production, whether they have symptoms or not.

People are encouraged to make lifestyle modifications alongside taking their medication, and avoid food and beverages that trigger acid production.

At the summer meeting, the gastroenterologists discussed the incidence of Barrett’s in America, and how incidence rates are in perfect correlation to obesity rates.

If you are concerned that you may have Barrett’s, you’re encouraged to speak to your GP.
People with chronic reflux who are on medication but have difficulty controlling their symptoms, and who have not had an endoscopy can speak to their GP about referral for specialist assessment.

**Most Benign Right-Sided Polyps Do Not Require Colon Resection**

Difficult-to-remove colon polyps often are treated with partial colon resection but a small, randomized study presented at the 2014 Digestive Disease Week (DDW) meeting suggests laparoscopic-assisted colonoscopic polypectomy (LACP) requires fewer resources and is just as effective. The 34-patient study showed that LACP took significantly less time to perform than laparoscopic hemicolectomy (LHC), and was associated with a faster recovery, shorter hospital stay and less blood loss.

“All anytime you can find a way to conserve resources while achieving comparable outcomes, that approach is worth studying further,” said Lawrence Friedman, MD, chair of the DDW Council and chair of the Department of Medicine, Newton–Wellesley Hospital, Newton, Mass. “Long-term outcomes will need to be studied, but these data look quite promising,” said Dr. Friedman, who was not involved in the study.

Lead investigator Jonathan Buscaglia, MD, associate professor of medicine and director of Interventional Endoscopy, Division of Gastroenterology, Stony Brook University, Stony Brock, N.Y. said that LHC often is used to remove difficult-to-remove colon polyps. To determine whether LACP can be used in place of LHC for this indication, Dr. Buscaglia and his colleagues randomized 34 patients with benign right-sided polyps to undergo either LACP or LHC. The two groups were similar in age and gender distribution, average body mass index, American Society of Anesthesiology class and history of previous abdominal surgery; polyp morphology, location, size and histology were similar between the two groups.

Dr. Buscaglia reported that physicians were able to remove polyps in 92.9% of patients assigned to LACP with one patient requiring conversion to LHC. In the group randomized to LHC, four patients required conversion to laparotomy. His team also found that LACP required less time than LHC (95 vs. 179 minutes; \( P = 0.001 \)) and LACP patients lost less blood (13 vs. 63 mL; \( P = 0.001 \)). LACP patients also required less IV fluids (2.1 vs. 3.1 L; \( P = 0.049 \)), took less time to pass flatus (1.44 vs. 2.88 days; \( P = 0.002 \)), resumed solid food intake sooner postoperatively (1.69 vs. 3.94 days; \( P < 0.001 \)) and were discharged earlier (2.63 vs. 4.94 days; \( P < 0.001 \)).

Rates of postoperative complications, hospital readmissions and reoperations were similar in the two groups. Although the investigators did not conduct a cost-savings analysis, there could be significant differences in that measure, Dr. Buscaglia noted.

During a press conference where he presented the findings, Dr. Buscaglia said that although LACP has clear benefits, adoption of the procedure has been slow, in part because of a paucity of well-designed studies.

“Until now, there have been only a handful of published case series on LACP,” he said.

Physicians also may find it more challenging to schedule an LACP, he added.

“The biggest roadblock to performing LACP is the ability of a surgeon and gastroenterologist to coordinate their schedules,” Dr. Buscaglia said. “You need a good relationship between the two departments, and schedules that can accommodate being in the operating room at the same time. It’s not always the easiest thing to do.”

Dr. Buscaglia said patients in the study will undergo surveillance colonoscopies to determine whether there are any differences in their long-term outcomes.
Fecal Transplants for IBD Show Mixed Results in Trials

by David Wild

Chicago - Fecal transplant has reached a critical milestone: testing in the first randomized controlled trial of the therapy to treat inflammatory bowel disease.

Although this step might be good for science, the news was not so encouraging for patients. The treatment did not appear to be better than placebo transplant at alleviating symptoms of ulcerative colitis (UC), according to the researchers.

“Although we did not find a statistically significant effect of FMT [fecal microbiota transplantation] in active UC, there is the possibility that FMT may be effective when administered longer than six weeks,” the researchers said, noting that there were no major adverse events.

The study, led by Paul Moayyedi, MBChB, PhD, MPH, acting director of the Farncombe Family Digestive Health Research Institute and director of the Division of Gastroenterology at McMaster University, in Hamilton, Ontario, Canada, was one of several trials of FMT whose results were presented at Digestive Disease Week (DDW) 2014.

In the trial, the researchers randomized 27 patients with mild to moderate UC to receive an FMT enema and 26 patients to receive a placebo enema, both once weekly for six weeks (abstract 929c). The patients had active disease, with Mayo scores of 4 or higher and endoscopic Mayo scores of 1 or greater. Subjects had not used antibiotics within the month before FMT and had tested negative for Clostridium difficile. Roughly 45% in both groups had pancolitis. During the study, 42% of subjects received corticosteroids, 19% continued with immunosuppressive treatment and 9% continued with biologic therapy.

The findings showed that four FMT recipients (15%) and two placebo subjects (8%) achieved clinical remission, defined as a Mayo score of 2 or less and an endoscopic Mayo score of 0, a difference that was not statistically significant. Seven FMT patients (26%) and eight placebo recipients (31%) experienced improvements of at least 30% in their Mayo scores.

But FMT might be more effective with increasing treatment duration. In a subanalysis, 16 FMT recipients who reported subjective improvements after initial treatment, but did not achieve clinical and endoscopic remission, continued with six to 12 weeks of additional therapy. Five of these patients subsequently experienced clinical remission.

In a separate, open-label study, seven UC patients received a single FMT infusion colonoscopically (abstract Su1403). Scores on the Ulcerative Colitis Disease Activity Index (UCDAI) and histologic results of rectal biopsies were obtained before and one month after FMT. One patient experienced remission at one month, with a drop in UCDAI score from 8 to 2 and resolution of histologic inflammation, but did not maintain remission.

“Among all patients, there was a statistically significant drop in UCDAI scores at one month and a trend toward improvement in histologic scores,” the investigators said, adding that one patient experienced a colonoscopy-related perforation and was excluded from the analysis.

The variation in responses in these studies points to the need to refine FMT protocols, said Lawrence J. Brandt, MD, professor of medicine and surgery at Albert Einstein College of Medicine and emeritus chief of the Division of Gastroenterology at Montefiore Medical Center, in New York City.

“These studies all show that FMT may have a therapeutic role in treating IBD, but the precise patients for whom it is best suited and the best approach to administering it need to be further studied,” said Dr. Brandt, who was not involved in the latest research.

Although Crohn’s disease “is overall less responsive to FMT,” as a recent review stated (Borody TJ, et al. J Clin Gastroenterol May 22, 2014 [Epub ahead of print]), findings from a pair of studies presented at DDW help tip the balance in favor of a place for FMT in the treatment toolbox for the disease.

In one study, eight patients with active Crohn’s disease received a single FMT infusion colonoscopically in an open-label fashion (abstract Mo1228). The patients had a median score on the Harvey-Bradshaw Index (HBI) of 8 at baseline, indicating mild to moderate disease severity. Before FMT, no patients received biologics, antibiotics, probiotics or steroids at a dose greater than 20 mg per day.

The investigators documented scores on the HBI, the Crohn’s Disease Endoscopic Index of Severity (CDEIS) and the short Inflammatory Bowel Disease Questionnaire (sIBDQ), which measures quality of life, at baseline and up to three months for some patients. They also documented levels of C-reactive protein (CRP), a marker of inflammation.

At the follow-up visit at four weeks, five patients (62%) achieved clinical remission, defined as an HBI score less than 5, and there were significant decreases in CRP levels and improvements in sIBDQ scores. Data from four patients monitored eight weeks after FMT and two patients monitored at 12 weeks showed that all of these individuals were in clinical remission. However, two patients required an increase in their Crohn’s medication within four weeks of FMT. Consistent with other FMT safety data presented at DDW, the researchers said there were no serious adverse events.

“These preliminary results suggest FMT is safe and can induce early improvements in symptoms in patients with active [Crohn’s disease],” the investigators told Gastroenterology & Endoscopy News.

“Whether the improvements can be sustained, and whether they correlate
with objective [endoscopic] measures of inflammation, still need to be determined."

FMT was mostly effective in inducing remission in a group of nine children and teenagers with mild to moderate CD, who received a single transplant nasogastrically (abstract Tu1754). These patients, who were between 12 and 19 years old, received a three-day course of rifaximin before FMT as well as omeprazole the day before FMT.

The investigators found that mean scores on the Pediatric Crohn’s Disease Activity Index (PCDAI) dropped from 19.7 (±7.2) at baseline to 6.4 (±6.6) after two weeks, rising slightly to 8.6 (±4.9) at six weeks. That difference was not statistically significant. Moreover, seven patients (78%) were in clinical remission two weeks after FMT, defined as a PCDAI score of 10 or lower. Two of these patients relapsed six weeks after FMT, and five patients required maintenance drug therapy by that time.

“It’s the experience of the few researchers looking at FMT for IBD that, unlike the single administration of FMT that’s required for Clostridium difficile treatment, some IBD patients likely need several infusions to induce remission and most patients require ongoing maintenance FMT,” Dr. Brandt said. He noted that he has seen mixed results in his own Crohn’s patients to whom he has administered FMT.

“The success of FMT in both Crohn’s disease and ulcerative colitis patients may have to do with disease characteristics, such as precipitating factors, genetics, age at onset, disease duration and severity, location of disease and perhaps the patient’s intestinal microbiota,” Dr. Brandt said. “It may be that we need to look at the patient’s unique bacterial composition and determine which organisms need to replaced, and formulate FMT accordingly.”

The Functional Gut Clinic achieves UK’s first IQIPS accreditation for gastrointestinal physiology

The Functional Gut Clinic has become the first gastrointestinal organisation to be granted UKAS accreditation under the Improving Quality in Physiological Services (IQIPS) programme. The accreditation award is for the clinic’s range of gastrointestinal (GI) services carried out at its four clinics across London and Kent.

Dr Anthony Hobson PhD is a Consultant Clinical Scientist and Clinical Director at the clinic. He said. “The services we provide are complementary to conventional GI diagnostics and add value to the patient and Doctor experience. Therefore, it is very important to make sure we are performing to the highest standards. The IQIPS process gave us the opportunity to open ourselves up to a thorough inspection, receive valuable and constructive input from the IQIPS team on how we could make our service even better and then implement these improvements. We are very proud of becoming the first GI Physiology Service to obtain the UKAS / IQIPS standard and will wear it as a badge of honour.”

Dr Kenny Tinkler is the clinical lead for the IQIPS programme at the Royal College of Physicians (RCP). She said. “It is fantastic to have the first accredited GI physiology service provider! This achievement of IQIPS accreditation by the Functional Gut Clinic marks real progress in the drive for patient focused high care and I hope that it will prompt other GI physiology services to join the IQIPS programme. Achieving accreditation provides reassurance of the high quality of the service for patients, users of the service and commissioners as well as being a ‘badge’ of quality that the staff can be proud of, well done to all at the Functional Gut Clinic.”

Paul Stennett, UKAS Chief Executive said:  
“UKAS has been working closely with RCP on a plan for the staged roll out of accreditation to each IQIPS specialism. I am therefore delighted that The Functional Gut Clinic has achieved the first gastrointestinal IQIPS accreditation, to add to those already awarded in the audiology and vascular science disciplines.”

Dr Hobson is encouraging peers to consider IQIPS accreditation as he believes it will ensure that standards of clinical practice are up to date throughout the industry. He said. “At some centres where accreditation is not high on the agenda the standards of operation may be lower. By going through, and hopefully achieving, the IQIPS accreditation process, more centres will be able to improve and update their practices, raising standards across the board. Meeting the highest possible standards is something we should all aim for as professionals and as a discipline.”
OUR EXPERIENCE OF A PHARMACIST LED IMMUNOMODULATOR (IMD) CLINIC: A NOVEL SERVICE IN A DISTRICT GENERAL HOSPITAL

Authors: V.Sathyanarayana, K.Kapur, F.Fuertes, E.Said, A.Soliman, S.Riyaz, D.West, G.Smith, N.Sanassee
Department of Gastroenterology and Pharmacy Department, Barnsley Hospital, UK

Introduction:
Increasing numbers of patients are being treated with immunomodulators (IMD) for inflammatory bowel disease (IBD) and autoimmune hepatitis (AIH). This needs intensive monitoring and impacts by increasing clinic waiting times. After approval from the Quality and Safety Board of the Trust, a pharmacist led IMD clinic was established in 2012 to manage patients initiated on IMD (only thiopurines) for initial monitoring and dose titration with a view to reduced clinic visits.

Method:
- Decision to commence IMD by clinician
- Patient appropriately counselled, information leaflets given and screening bloods performed
- Referred to the pharmacist-led IMD clinic
- Seen by pharmacists and further counselling given
- Blood forms and prescriptions issued by pharmacists
- Blood tests done by either GP or Hospital and monitored by pharmacist
- Patient given option of being contacted by telephone, text messages or email with results
- Patient advised to dose according to bloods

- Blood tests weekly for first 2 months, then fortnightly for 2 months and 3 monthly thereafter
- Once doses were stabilised, patient was discharged back to GP for on-going prescriptions and monitoring

Results:
- 81 patients referred to pharmacist-led IMD clinic between Oct. 2012 and Oct. 2013 (50F); Median age 44 (range 19-76)

Side effects were reported in a third of patients (n=27). These were most commonly reported between week 2 and 6 of initiation of treatment:
- Nausea and/or vomiting was the most common side effect (n=16). Others were fatigue, myalgia, rash, abdominal cramps, flu-like symptoms and drowsiness
- Abnormal blood tests were noted in nearly 20% of patients (n=16) [Hepatotoxicity 10, myelosuppression 6]
- Six patients were admitted to the hospital during this period (myelosuppression 2, pancreatitis 1, unrelated to thiopurines 3)

A pharmacist-led clinic is a safe alternative to conventional gastroenterology clinics for monitoring of patients on IMD.

Adverse events were picked up early and adequately acted upon.

Thiopurine s-methyltransferase (TPMT) does not predict side effect profile

There was a high level of patient compliance.

The average number of clinic visits saved were 10 per patient.
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Barnsley Hospital NHS Foundation Trust

Conclusion:
• A pharmacist-led clinic is a safe alternative to conventional gastroenterology clinics for monitoring of patients on IMD.
• Adverse events were picked up early and adequately acted upon.
• Thiopurine s-methyltransferase (TPMT) does not predict side effect profile
• There was a high level of patient compliance.
• The average number of clinic visits saved were 10 per patient.
The first years outcome data from IBD-SSHAMP; UK’s first remote web-based self management programme for stable IBD patients.

MW Johnson, K. Lithgo, T Price
Gastroenterology Department, Luton & Dunstable University Hospital, Luton. LU40DZ. UK.

Introduction

In February 2012 the Luton & Dunstable University Hospital, became the first hospital in UK to start a remote (web-based) management programme for stable inflammatory bowel disease (IBD) patients. The project, entitle IBD-SSHAMP (Supported, Self Help And Management Programme), was funded by an Innovation Award presented by the East of England Primary Care Trust’s (PCT) Innovation Team. The aim was to transfer as many as possible stable IBD patients from routine clinic visits, efficient remote management within the community, whilst maintaining a close monitoring system co-ordinated through specialist nurses.

Aims

To prove cost effectiveness by reducing the number of unnecessary routine outpatient appointments.

Method

A retrospective 10 year review identified a total of 2790 IBD patients, of which 2420 were still undergoing regular review. Of these, 26 patients lacked mental capacity with learning disability or dementia and 117 did not have internet access. Using Patient Knows Best we developed individualise websites to be offered out to all our patients. A proportion of them would be stable enough to engage in out remote management system through IBD-SSHAMP. The sites offer a communication portal between community based patients and the hospital based specialist support. There is a symptomatic assessment tool that offers direct self management advice dependant on results, using a traffic light system. An alert is sent to the IBD team if any patients scores badly (orange or red) so that patients can be supported in management optimisation.

Results 1

The system developed relies on three key features;-
1)The National IBD - Registry System
2) Patient Knows Best disease specific personalised websites
3) Remote monitoring through twice yearly virtual telephone clinics and automated faecal calprotectin and blood inflammatory markers.

Conclusions

So far just 3 patients have needed to be accommodated in emergency OPA clinics, with no hospital or surgical capacity for them. In conclusion, IBD-SSHAMP is UK’s first internet friendly and efficient management system. 

(see table below) , whilst still providing a patient follow up clinic appointments costing our CCG £85, this project could potentially save them £130,000 per year.
abstract no. pth-051

the first years outcome data from ibd-sshamp; uk’s first remote web-based self management programme for stable ibd patients.

k. lithgo, t price

luton & dunstable university hospital, luton. lu40dz. uk.

results 2

of the available 2,277 ibd patients, we have successfully transferred 400 onto the first wave of ibd-sshamp. however, since writing the abstract we are now up to 520 patients. we expect a further 300 to join up by the end of 2014. as the confidence in the system grows, we expect this second wave to include many patients stable on immunosuppressants eg. azathioprine.

with most patients being seen at 6 monthly intervals in follow up clinic appointments costing our CCG £85, this project could potentially save them £130,000 per year (see table below), whilst still providing a patient friendly and efficient management system.

<table>
<thead>
<tr>
<th>cost</th>
<th>savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>ibd - r / pms</td>
<td>£4,000</td>
</tr>
<tr>
<td>pkb</td>
<td>£3,000</td>
</tr>
<tr>
<td>calprotectin</td>
<td>£24,000 (2x/y)</td>
</tr>
<tr>
<td>ibd nurse</td>
<td>£30,000</td>
</tr>
<tr>
<td>virtual opas</td>
<td>£36,000</td>
</tr>
<tr>
<td>total</td>
<td>£97,000</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>oPAs 800 x 2 x £115</td>
<td>£184,000</td>
</tr>
<tr>
<td>saved colonoscopies</td>
<td>£42,000 - £120,000</td>
</tr>
</tbody>
</table>

so far just 3 patients have needed to be accommodated in emergency OPA clinics, with no hospital or surgical events.

conclusions

in conclusion, ibd-sshamp is uk’s first internet based remote management system for managing stable ibd patients. it aims to reduce cost and free up NHS outpatient time, whilst providing an efficient monitoring and management programme. this is a proof of concept project, from which further data outcomes will be presented.
Trends in Hospital Admissions With Alcohol Related Liver Disease in South-East England

Shah N, Warner B, Potts J, Verma S
Brighton and Sussex University Hospital

Background
Morbidity and mortality from alcohol related liver disease (ARLD) has increased significantly in England. We aimed to assess the impact of the change in the alcohol licensing law in 2005 on hospital admission rates as well as morbidity/mortality from ARLD.

Methods
Our institute is a large teaching hospital in South-East England with a referral base of ~300,000 patients. This was a retrospective study between Jan 2006 to Dec 2011. Biochemical, radiological and the microbiology data were collected for each patient from the hospital computerised records. The reason for hospital presentation including the length of stay were collected. Patients identified using the ARLD ICD code (K70). Hospital admissions were divided into period 1: Jan 2006-Dec 2008 and period 2: Jan 2009-Dec 2011.

Results

<table>
<thead>
<tr>
<th>No. of admissions in Period 1 (Jan 2006-Dec 2008) versus Period 2 (Jan 2009-Dec 2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. Hospital Admissions</td>
</tr>
<tr>
<td>No. Patients (Pts)</td>
</tr>
<tr>
<td>Mean Age</td>
</tr>
<tr>
<td>Mean MELD</td>
</tr>
<tr>
<td>Males</td>
</tr>
<tr>
<td>No. Pts &gt;1 Admission</td>
</tr>
<tr>
<td>No. Pts ≥5 Admissions</td>
</tr>
<tr>
<td>Mean Duration Of Stay</td>
</tr>
<tr>
<td>Pts Staying For ≥ 10 days</td>
</tr>
<tr>
<td>Pts Requiring ICU</td>
</tr>
<tr>
<td>Pts With Infection</td>
</tr>
<tr>
<td>Pts Requiring Blood Products</td>
</tr>
<tr>
<td>Overall Mortality</td>
</tr>
</tbody>
</table>

Comparing admission in periods 1 and 2 there were no statistical differences in age (52.52 ± 9.9 vs 51.82 ± 11.1 yrs), MELD score (17.90 ± 6.7 vs 17.93 ± 6.4), duration of hospitalisation 4 (1-102) vs 4 (1-62) days, ICU stay [44/441 (10%) vs 40/551 (7.2%)] and administration of blood products (32.2% vs 27.8%) (p>0.05).

However infection was more likely to be diagnosed during period 2 [100/551 (18.1%) vs. 57/441 (12.9%), p=0.025]. Despite this, overall mortality was significantly lower in period 2 [57/551 (10.3%) vs 99/441 (22.4%) p < 0.001]. MELD score (OR 1.09, 95% CI 1.05-1.19, p<0.001) and ICU admission (OR 2.36, 95% CI 1.10-5.07, p=0.028) were independent predictor of mortality

Conclusions
➢ Hospital admissions with ARLD have increased significantly between 2006-2008 and 2009-2011
➢ Approximately 25% of all admissions are 10 days or longer.
➢ Despite overall high in mortality, there was a more than 50% reduction in mortality during the 2009-2011 period despite similar MELD scores and a significant increase in prevalence of infections.
Investing in research of the patient experience is key to a sustainable provision of healthcare in the UK

Fact: The patient is number one! This notion applies not only to the current throughput of 1,116,000 endoscopy patients being treated at our hospitals each year¹, but also the future patients that will eventually follow suit, as the NHS’ Bowel scope endoscopy screening programme grows to a predicted 60 per cent roll-out by March 2015 and a full roll-out by 2016².

As the NHS – and other healthcare systems – recognises not only the patient benefits of early diagnosis but the significant cost-savings of halting disease at its earliest point, there is a greater need for training in endoscopy services and more research, particularly as a result of the national screening roll-out. Notably bowel cancer is the third most common form of the disease in the UK, with around one in 20 people developing the condition during their lifetime³ – and therefore it is crucial to understand the patient’s perspective of the care experience and streamline the essential diagnostic and detection process.

South Tyneside District Hospital is set to play a vital role in the development of a patient experience research programme for the South Tyneside NHS Foundation Trust, supported by specialist Fujifilm endoscopy equipment provider, Aquilant Endoscopy.

Professor Colin Rees and Dr. Simon Panter are leading a team in the development of a PREM (Patient Recorded Experience Measure) tool to provide a better understanding of the patient experience during and after an endoscopy procedure, which will help to improve future patient care.

According to Professor Rees: “New technological innovation and research need to go hand in hand to ensure that the boundaries of healthcare continue to expand. With increasing pressure placed on endoscopy departments, demand is increasing for both endoscopy procedures and research to improve disease recognition techniques, and patient care during and after these procedures.”

There is an increasing body of disparate evidence-based data investigating the patient experience – such as Patient Opinion, existing internal assessments and other healthcare centres – and the South Tyneside research plays an important role in building the overall picture and helping to create an improved service for patients.

The patient experience is currently designed by clinicians, rather than patients themselves. Despite this, it has become clear that what the patient feels is important does not always align with what clinicians recognise as important.

The measurement of the patient experience needs to be robust and derived from what patients tell clinicians. The traditional, consultant-led approach leads to misalignment between what the patient feels is important, in comparison to what the consultant believes the patient is experiencing. The emotional and care aspects of the patient experience are essential to help make the patient feel more comfortable, especially if they need to stay in hospital. The emotional side of care is important to address, which can be managed by the nursing team instead of the consultants, as they can make the patient more comfortable and make any changes to help improve their situation.

Professor Rees added: “It’s important to look at how endoscopy units are run, in order to work out how to make improvements. This has become even more apparent due to the increased cohort for bowel cancer screening; the screening programme will eventually be offered to everyone and is predicted to save over 2,000 lives each year by 2025, so healthcare providers need to make sure we’re good at delivering excellent standards of care and treatment.”

² http://www.cancerresearchuk.org/cancer-info/cancerstats/keyfacts/bowel-cancer/cancerstats-key-facts-on-bowel-cancer
More emphasis needs to be placed on the patient, as it is them who are going through the process – not us. We need to listen, understand and react to how they are feeling and responding, in order to provide the best experience possible."

With increasing age, the incidence of both benign and malignant gastrointestinal (GI) disease rises, placing greater pressure on clinical teams to provide increasingly more procedures. In the UK there are approximately 10 million people aged over 65 years old and it is estimated that there will be around 5.5 million more elderly people in 20 years\(^5\). The growing number of elderly people has had a huge financial impact on the NHS, where average spending for retired households is nearly double that for non-retired households.

Furthermore, cancer is a prevalent disease in elderly patients, who are also more likely to have comorbid illnesses than younger patients\(^5\). As these patients have a higher risk of developing diabetes, heart disease and other conditions – or already have such ailments – it makes monitoring more difficult, as the clinical team needs to be aware of their additional conditions, which may make the patient more fragile, apprehensive or worried about how other medication may affect them.

The patient benefits of early cancer diagnosis is well reported, as it enables clinical staff to not only start treatment far quicker, but it also has significant cost-savings of halting disease at its earliest point. However, this also places additional pressure on front line staff at the two-week screening point to conduct the initial tests, care and support, whilst coping with the rising patient throughput.

It is also challenging if there aren’t sufficient staff to support the national bowel cancer screening programme, as nursing staff won’t have enough time to cope with the additional patients.

The NHS has gone to great lengths to support clinicians across the country to implement the national programme. From the establishment of 10 NHS bowel cancer screening training centres in England to resource packs delivered to GPs prior to the roll out, the NHS has prepared healthcare professionals with the resources they need.

Andrew Dawe, General Manager of Aquilant Endoscopy – the UK’s exclusive distributor of Fujifilm equipment – commented: “We’re extremely pleased to be able to support the South Tyneside Hospital endoscopy team with their research into the patient experience. We recognise that the NHS needs as much financial support as possible to make a positive change; this doesn’t just apply to research into finding cures or testing drugs, but also exploring how we can do things differently. We look forward to seeing what the final measurement tool will look like and the impact it will have on patients in the North East.”

The initial PREMs research conducted by the South Tyneside District Hospital endoscopy team is expected to be completed by September 2015, which will go on to be used in future studies. The team will assess whether it is appropriate to be rolled-out across the country, as additional research may be required to determine whether different NHS Trusts will benefit from this patient analysis.

For more information about South Tyneside District Hospital, please visit www.sthct.nhs.uk

For more information about Aquilant Endoscopy, please visit www.aquilantendoscopy.com

\(^4\) http://www.parliament.uk/business/publications/research/key-issues-for-the-new-parliament/value-for-money-in-public-services/the-ageing-population/

\(^5\) Chen et al. 2012
We invite you to join us at the inaugural Endolive UK meeting which will take place at the International Convention Centre (ICC), Birmingham on Thursday 12 and Friday 13 March 2015. This interactive meeting will showcase UK endoscopy at its best and will also include input from invited international experts: Paul Fockens, Doug Rex and Peter Siersema.

Programme highlights for 2015 include:

- State of the art interactive scientific programme running over the course of two days
- ‘Meet the Experts’ sessions
- World-class invited speakers
- Live endoscopy procedures (via video link) from key locations within the UK
- Nurse targeted content
- Reduced registration rates for nurses and trainees

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