Gastroenterology Symposium

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Gastroenterology faces a variety of challenges, from the rising tide of chronic liver disease, to the impact of the bowel cancer screening programme. This symposium provided an update on some of the most significant recent advances within the specialty, in particular the progress made in the treatment of motility disorders, therapeutic endoscopy, chronic viral hepatitis and inflammatory bowel disease.

SESSION 1 – GASTROINTESTINAL MOTILITY: SCIENCE AND PRACTICE

The first session opened with Professor Robin Spiller (Lead Director of NIHR Biomedical Research Unit in Gastrointestinal Diseases, Nottingham University), who discussed current research into the aetiology of irritable bowel syndrome (IBS). There is an association with immune activation in the mucosa, with evidence for increased mast cells and T lymphocytes in some subtypes. He also discussed a recent randomised controlled trial that demonstrated symptomatic improvement in diarrhoea-predominant IBS patients with ondansetron.[1]

Dr Anton Emmanuel, (Consultant Gastroenterologist, University College Hospital, London), focused on IBS management. He emphasised the central importance of the doctor/patient relationship, and advocated tailoring therapy to the patient's symptoms and subtype of IBS. He reminded us that loperamide is very useful in patients with diarrhoea; a lack of symptomatic response may be due to bile acid malabsorption. A low fermentable, oligo- di-, mono-saccharides and polyols (FODMAP) diet may improve bloating and flatulence, but not pain, diarrhoea or nausea. Psychotherapy has a similar efficacy to antidepressants, and 60% of patients respond to hypnotherapy.

Professor Owen Epstein (Consultant Gastroenterologist, Royal Free Hospital, London), reviewed biliary pain with normal investigations. In patients with typical biliary pain, with normal endoscopy, ultrasound and magnetic resonance cholangiography results, he advocates excluding porphyria and considering painful lower rib syndrome. Endoscopic ultrasound can detect microlithiasis, which may be missed on other imaging studies. Gall bladder dysmotility may be responsible for biliary pain, which can be assessed with a hepatobiliary iminodiacetic acid (HIDA) scan. If this is positive and the patient has significant symptoms, a laparoscopic cholecystectomy may be considered. If normal, the patient may have type III sphincter of Oddi dysfunction. This should be treated conservatively if possible; long-term outcomes are similar, with the benefit of minimising iatrogenic complications.

SESSION 2 – ENDOSCOPY: BEST USE OF NEW MODALITIES

Dr Adrian Stanley (Consultant Gastroenterologist, Glasgow Royal Infirmary) discussed early management of upper gastrointestinal bleeding. He recommended initial risk stratification with the Blatchford score, and that the Rockall score is calculated after endoscopy. Evidence-based guidelines advocate dual endoscopic therapy for ulcer bleeding, followed by proton pump inhibitors (PPIs). Variceal bleeding should be managed with antibiotics, terlipressin, and band ligation (for oesophageal varices), with a transjugular intrahepatic portosystemic shunt (TIPSS) considered for uncontrolled bleeding.[2]

Dr Ian Penman (National Endoscopy Lead for Scotland and Consultant Gastroenterologist, Royal Infirmary of Edinburgh), discussed cystic neoplasms of the pancreas. There is a wide differential diagnosis, ranging from lesions with low malignant potential (serous cystadenoma) to main duct intra-ductal papillary mucinous neoplasms (IPMN, 70% malignant or have malignant potential). Endoscopic ultrasound (EUS) and cytology may help to clarify the type of lesion, although pre-operative diagnostic accuracy (EUS plus cross-sectional imaging) is estimated to be 70%. In the future, confocal endomicroscopy during EUS, and genetic analysis of cyst fluid may improve diagnostic accuracy. Recent work in this area has linked GNAS, a ubiquitin gene mutation, with IPMN.

Finally, Mr Mark Potter (Consultant Colorectal Surgeon and Honorary Clinical Senior Lecturer, Western General Hospital, Edinburgh), described advances in the management of difficult colonic polyps. Endoscopic technologies, including narrow band imaging and chromoendoscopy, can be used to differentiate between adenomatous and hyperplastic polyps.[3] Increasing, more challenging polyps are being removed endoscopically, often with endoscopic mucosal resection (EMR). This has been shown to compare favourably with surgical management of polyp cancers; local data show a reduction in procedure related morbidity and mortality.

SESSION 3 – LIVER DISEASE: CHANGING AND CHALLENGING TIMES

The Sydney Watson Smith Lecture was delivered by Professor Harry Janssen, (Professor of Hepatology and Chief of Liver Diseases and Transplantation in Erasmus MC University Hospital, Rotterdam). Chronis hepatitis B (HBV) remains a major global health issue and treatment may result in disease remission, with reversal of fibrosis and a reduction in decompensated liver disease and hepatocellular carcinoma. Peginterferon alpha can be given for a finite duration and can result in immune control of HBV in a minority of patients. The newest antiviral drugs (entecavir and tenofovir) can achieve disease remission but require indefinite treatment to maintain this. In the future, serum HBV surface antigen quantification (which reflects the number of infected hepatocytes) may be used to identify patients who can stop treatment.

The theme of viral hepatitis continued with Professor Matthew Cramp's (Consultant and Honorary Professor of Hepatology, South West Liver Unit and Peninsula College of Medicine and Dentistry) discussion of hepatitis C (HCV). The protease inhibitors (PIs) boceprevir and telaprevir are new agents for the treatment of genotype 1 HCV. The PIs are used in combination with the previous standard therapy of ribavirin and peginterferon, and result in both increased sustained viral response, and side-effect burden. Many more new drugs are on the horizon, which could improve the rates of remission and may mean interferon-free regimes are available in the future.

Finally Dr Martin Lombard (Consultant Hepatologist, Royal Liverpool Hospital) discussed liver disease in the UK, from the perspective of his role as the Director of the National Liver Strategy for England. Mortality from liver disease in the UK now substantially exceeds that of France and Italy. The main contributors to this are alcohol-related liver disease (ALD), and non-alcoholic fatty liver disease (NAFLD). There is a 10–20 year lag time to the onset of cirrhosis, which affords an opportunity to intervene in an attempt to prevent disease progression. He advocates developing better systems to manage the burden of disease by combining different services, and being proactive as a specialty in tackling these issues.

SESSION 4 – INFLAMMATORY BOWEL DISEASE: MANAGEMENT DILEMMAS

Dr Charlie Lees (Consultant Gastroenterologist and Honorary Senior Lecturer, Western General Hospital Edinburgh) discussed the rational use of biological therapies in inflammatory bowel disease (IBD). Despite achieving remission with anti-inflammatory drugs (i.e. corticosteroids), with each flare of Crohn's disease, the bowel accrues damage. Using symptoms alone as a marker of remission may permit under-treatment and our aim should be achieving mucosal healing. Anti-TNF agents (infliximab and adalimumab) have proven efficacy in Crohn's, particularly in combination with thiopurines.[4] If a patient continues to have mucosal inflammation despite anti-inflammatory treatment, consideration could be given to the use of biologics. Withdrawal of anti-TNF therapy can be considered after 12 months, if the patient is well, with normal inflammatory markers, including calprotectin.

Dr Richard Russell (Consultant Paediatric Gastroenterologist, Yorkhill Hospital, Glasgow), highlighted the differences between the management of paediatric and adult IBD patients. A total of 60% of paediatric patients with IBD have Crohn's disease, often with more extensive disease than adult-onset Crohn's. Endoscopic assessment is usually performed with the patient under general anaesthesia. Exclusive enteral nutrition is the first-line therapy for Crohn's disease, with steroids in reserve for treatment failure. Azathioprine and methotrexate are used as steroid-sparing agents; although biologics have excellent response rates in children, their side-effect profile causes concern. Transition to adult care requires time and an individualised strategy, with care not to forget assessment of puberty and growth.[5]

TAKE-HOME MESSAGE

This symposium highlighted the breadth of gastroenterology and the sub-specialties it encompasses. Progress is seen in many areas, particularly in endoscopic technology and therapeutics. This optimism contrasted with aspects of Dr Lombard's talk on the current issues facing hepatology in the UK, where he highlighted that more needs to be done to prevent patients developing ALD and NAFLD. Attending this update provided useful insights from a broad range of experts on the management of many gastroenterological conditions.

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