

AGIP Council 2023

President:

Rami Sweis

Chair:

Anthony Hobson

Honorary Treasurer:

Joanne Hayes

Education Secretary:

Elisa Skinner (deputy Emma Jones)

Research and Website:

Andres Vales

Membership Secretary:

Kumud Solanki

Accreditation Officer:

Tanya Miller

(deputy Samantha Scott)

Publication Secretary:

Elisabeth Kirton (deputy Gemma Norris)

Lower GI Representative:

Mark Scott

Symposium Secretary:

Anthony Hobson (deputy Oliver Smith)

IQIPS Representative:

Samantha Scott

Paediatric

Representatives:

Rachael McGhee Helena Gorick

Minutes Secretary:

Jennifer Morgan

Welcome

Welcome to the **October 2023** edition of NewWave!

If you have any relevant articles or papers that you would like to be included in future editions, please email elisabeth.kirton@nhs.net

CONTENTS

Page 2 Upcoming Events 2023 / 2024

Page 3 From the Editor

Feature Articles

Page 4 Event Review: The South West GI Physiology Group Meeting, 8th September 2023 (Samantha Scott)

Page 10 Event Review: The 26th Annual Association of Upper Gastrointestinal Surgery (AUGIS)
Conference, 27th – 29th September 2023
(Naomi Rune)

Page 14 Event Review: Laborie Advanced HRM and Impedance/pH Study Day, 21st September 2023 (Elisabeth Kirton)

October 2023



Are you interested in becoming a UKAS Independent Technical/Peer Assessor for the IQIPS scheme?

Accreditation for Physiology services is rapidly expanding and UKAS urgently need practising physiologists or consultants within Gastrointestinal Physiology to become assessors for the scheme. Participation will contribute towards your CPD portfolio.

The IQIPS standard has been developed by the Accreditation Clinical Advisory Group (ACAG) originally in partnership with The Royal College of Physicians as a patient focussed, nationally recognised measurement of quality for physiology services. It gives confidence to patients, purchasers, staff and managers about safety, effectiveness and sustainability of your physiology service. Physiological Science accreditation is recognised by the Care Quality Commission (CQC) as a valuable source of information to support its regulatory function.

We, the United Kingdom Accreditation Service (UKAS) have been appointed by government under a memorandum of understanding to manage and deliver the scheme and is looking to increase our assessment capacity in line with growing demand.

Qualifications and experience

Ideally you should have at least four years practical experience, preferably at a senior level, in your specific physiology discipline.



Training

You will receive in depth training to prepare you for completing assessments. It also provides valuable insight into the accreditation process should your service be preparing for accreditation or is accredited. Training is funded and provided by UKAS.

Assessments

Each assessment consists of a 1-2 day(s) assessment either on site or remotely accompanied by 0.5-1 day reviewing evidence and formulating a report annually.

UKAS contracts independent technical assessors on a day rate basis, either as self-employed contractors or through their current employer. The level of work is dependent on the needs of our customers and therefore UKAS cannot guarantee specific levels of work. Some travel in the UK and overnight stays may be required. And reasonable expenses are reimbursed.

Further information:

If you would like to discuss the role further, please contact Laura Booth, UKAS Senior Assessment Manager on 01784 429000



INTRODUCING A NEW CATHETER BASED IMPEDANCE/PH MONITORING SYSTEM



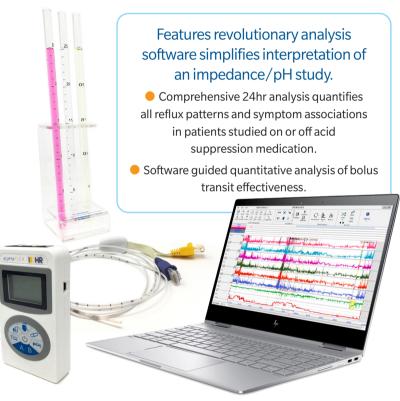


The alpHaFLEX catheter based Impedance/ pH Monitoring System combines the very latest in sensor and data visualisation technologies to bring an unprecedented level of accuracy and simplicity to oesophageal

reflux monitoring. Traditional pH recording only records acidic pH reflux episodes. Impedance/pH detects both acidic and non-acidic reflux episodes. Combined Impedance pH recording is clinically useful in the evaluation of symptoms under PPI therapy, as well as for hoarseness, unexplained cough and applications of particular interest.

Advantages offered by the alpHaFLEX System include:

- Combined pH-impedance system: Enables you to reliably distinguish between acid and non-acid episodes.
- Small lightweight but powerful recorder with large, easy to understand controls for ease of patient use.
 - A range of Adult and Paediatric Catheters available.



Upcoming Events: 2023/2024

| November 2023 | Pelvic Floor Society 14th Annual Conference Belfast The Pelvic Floor Society 15 th —17 th November 2023 |
|---------------|---|
| November 2023 | BSG Campus 2023 Online Event BSG Campus 20 th —23 rd November 2023 |
| April 2024 | 30 th UKCS Annual Scientific Meeting Cheltenham <u>UKCS</u> 10 th —12 th April 2024 |
| May 2024 | Digestive Disease Week (Washington D.C. + Virtual) Digestive Disease Week 18 th —21 st May 2024 |
| June 2024 | BSG LIVE 2024 ICC Birmingham BSG LIVE 17 th —20 th June 2024 |
| October 2024 | ICS 2024 Madrid ICS 23 rd —25 th October 2024 |

From the Editor

Welcome to the October 2023 issue of NewWave! 2023 seems to be flying by, as we already head into the shorter and darker winter days.

In this issue, Samantha Scott has kindly provided an engaging overview of the latest South West GI Physiology Group meeting. The meeting was successfully co-hosted by Sam and Laura Thomas at North Bristol NHS Trust in September, and covered a range of interesting topics, including the management of anal fissures, the obstetric anal sphincter injury (OASI) clinic at North Bristol NHS Trust, and the role of GI Physiology investigations in surgical management (Page 4).



Naomi Rune has also written a great summary of her attendance at part of the 26th Annual Association of Upper GI Surgery (AUGIS) Conference (Page 10). The conference was hosted in the Examination Schools venue at Oxford University, and sounds like a very interesting event for anyone working in Upper GI Physiology. As Naomi points out, physiology investigations support surgical decision making, and conferences such as this can help Clinical Scientists / GI Physiologists gain more understanding of the surgical therapies that may be available for patients.

This September I was able to travel to London to attend Laborie's "Advanced HRM and Impedance/pH Study Day", and it was lovely to see a few GI Physiology colleagues there. The study day featured a series of useful presentations relevant for practitioners already experienced in performing Upper GI Physiology investigations, with topics including supragastric belching, chronic cough, and challenging manometric artefacts. I've included a summary of the highlights on Page 14.

Finally, my 3 year term on the AGIP council has sadly come to an end, after joining the council in 2020. As much as I've enjoyed looking after NewWave, the time has come to pass the baton on, and I'm delighted to announce that Gemma Norris will be succeeding me as NewWave Editor in the new year. I look forward to working with Gemma on the January 2024 issue as she transitions into the role. Welcome on board Gemma!

As always, please do get in touch (<u>elisabeth.kirton@nhs.net</u>) with any ideas for articles, or information you would like to share with the GI Physiology community via NewWave!

Elisabeth Kirton

Feature Articles

Event Review:

The South West GI Physiology Group Meeting: 8th September 2023

Samantha Scott – Lead Clinical GI Scientist
University Hospitals Bristol and Weston NHS Foundation Trust

Jointly held by North Bristol NHS Trust (NBT) and University Hospitals Bristol & Weston Foundation Trust (UHBW)

Appreciation to Laura Thomas from NBT for her outstanding effort in planning and coordinating a fantastic event, and to Samantha Scott from UHBW her contributions. The South West Meeting expresses their gratitude to the Medtronic Physiology team and the SNM/SNS teams for generously providing food and beverages for the occasion. Their support made this event all the more enjoyable.

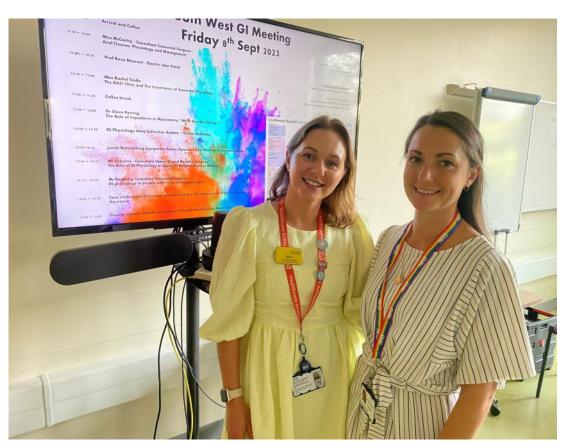


Figure 1. Samantha Scott (L) and Laura Thomas (R), co-hosts of the meeting

Miss McCarthy (Consultant Colorectal Surgeon) Anal Fissures: Physiology and Management

Miss McCarthy, a Consultant Colorectal Surgeon, discussed the physiology and management of anal fissures. An anal fissure is a painful condition that occurs when a tear or cut develops in the anal lining. McCarthy highlighted the surgical approach to treating anal fissures, involving a small incision at the 3 o'clock position, with the goal of preserving the internal anal sphincter. She emphasised the importance of training for surgeons in this field, as the procedure is delicate and rarely taught nowadays.

McCarthy also noted that most anal fissures heal on their own, but up to 5% may require intervention. She suggested that a tailored approach and improved patient education, possibly in collaboration with general practitioners, could help manage many cases of anal fissures more effectively. By avoiding unnecessary clinic visits and ensuring patients receive the right advice and creams, the burden on healthcare services and patients could be reduced, as anal fissures can be a highly painful condition with a significant societal impact. The talk also touched on the potential role of biofeedback therapy and alternative treatments in managing anal fissures, highlighting the ongoing uncertainty surrounding their effectiveness.

Miss Rachel Tindle (Clinical Scientist) The OASI Clinic and the Importance of Anorectal Physiology

Miss Rachel Tindle, a Clinical Scientist, discussed the significance of the Obstetric Anal Sphincter Injury (OASI) Clinic at North Bristol Trust. The clinic focuses on assessing and assisting women who have sustained third and fourth-degree anal sphincter injuries during childbirth. These severe injuries affect approximately 3% of UK deliveries and can have long-term consequences.

The clinic provides specialised assessment and care for affected women, typically between 6 to 12 weeks post-delivery, offering a comprehensive range of services, including physical therapy, psychological support and various diagnostic tests. Preliminary data from the clinic revealed that a substantial portion of patients had no symptoms (despite significant injuries), highlighting the importance of monitoring and preparing women for potential post-menopausal issues.

The clinic aims to follow up with patients to assess how symptoms may change over time, and provide personalised recommendations for future pregnancies. It also highlighted the role of Clinical Scientists in improving clinic efficiency and diagnostic services. Despite some challenges, including the delay in seeing patients due to staffing issues, the OASI Clinic aims to enhance its services and contribute to better care for women who have experienced anal sphincter injuries during childbirth.

Dr Steve Perring (Consultant Clinical Scientist) The Role of Impedance in Manometry: "What Are We Seeing?!"

Steve Perring, Consultant Clinical Scientist at Poole Hospital, discussed the role of impedance in manometry during his presentation. Impedance is essentially the resistance of the material through which electrical currents passes; impedance measurements can therefore provide valuable insights into the movement of fluid or boluses through the oesophagus. Steve explained that as a bolus of fluid travels through the oesophagus, the cross-sectional area affects impedance, with a larger stretch of the oesophagus resulting in lower impedance.

There was discussion around the relationship between impedance and the quality of contact between the impedance catheter and the oesophageal lining. Variations in impedance can indicate changes in contact quality, and these variations can be influenced by factors such as the presence of gas.

Overall, Steve emphasised the potential of impedance data to enhance our understanding of oesophageal function and suggested that further research may lead to changes in diagnostic criteria for conditions such as achalasia based on impedance measurements.

Professor Reza Nouraei (Consultant Laryngologist/Tracheal Surgeon) Gastric Inlet Patch

Prof. Reza Nouraei, a specialist in Laryngology and ENT, discussed the topic of gastric inlet patches. These patches are a relatively common phenomenon, often associated with symptoms such as persistent throat pain, irritation, the sensation of a lump in the throat, and difficulty swallowing, which overlap with various ear, nose, and throat issues. The identification of these patches is crucial, and their presence can vary significantly depending on the skill and awareness of the endoscopist.

Gastric inlet patches are formed of ectopic gastric columnar epithelium (predominantly parietal cells) in the oesophagus, at or just distal to the upper oesophageal sphincter. Although concerns about malignancy or perforation have been raised in the past, current guidelines do not recommend routine biopsy or surveillance once these patches are identified. The talk also emphasised the importance of a multidisciplinary approach to determine when treatment is necessary, with a focus on the role of GI Physiology, particularly mucosal impedance, in identifying the right candidates for treatment. This talk shed light on the common yet often misunderstood issue of gastric inlet patches, and the importance of a comprehensive evaluation to determine the need for treatment.

Ms Teresa Robinson (Head of Physiological Sciences, South West) Gl Physiology Data Collection Update

Ms Teresa Robinson, representing NHS England and the South West Regional team, discussed the national data collection initiative for GI physiology during her talk. She began by highlighting the complexities of collecting data for various physiological disciplines, acknowledging the challenges and variations in workforce, equipment, and service provision across regions.

Teresa emphasised the need to collect accurate data to understand the current status of GI physiology services, in order to secure appropriate funding and resources. She pointed out that the data collection is part of a broader diagnostics transformation program, aimed at increasing capacity and activity in diagnostic services. By collecting data on various physiological disciplines, the initiative seeks to address workforce limitations and understand the impact of services on patient care.

Teresa also shared examples of how data could be presented using custom-built dashboards, showing workforce, equipment, and activity data normalised by population size and age demographics. Teresa expressed the hope that these dashboards would help clinicians and decision-makers understand the current state of GI physiology services and make data-informed decisions to improve them. She concluded her presentation by acknowledging the challenges of data analysis due to limited resources, and stated that audiology data would be soon collected (along with other physiological specialties).

Mr Osborne (Consultant Upper Gl and Bariatric Surgeon) The Role of Gl Physiology in Upper Gl Surgical Decision Making

Mr Osborne, a Consultant Upper GI and Bariatric Surgeon, discussed the evolving role of physiology in upper gastrointestinal (GI) surgery. He emphasised the transition from traditional surgical approaches to more patient-centred, multidisciplinary decision-making processes. This shift involves considering the complexities and nuances of upper GI issues and incorporating physiology into the decision-making process.

Mr Osborne discussed the importance of accurately identifying the presence of conditions such as achalasia, as this significantly impacts treatment options. He highlighted the challenge of dealing with patients who have reflux symptoms, emphasising that it is crucial to inform patients about the risks and benefits of surgery (as well as touching upon the impact of weight and lifestyle on reflux).

Furthermore, he mentioned the importance of multidisciplinary team (MDT) discussions and the need to improve patient understanding of their condition and treatment options. He suggested that involving clinical scientists and physiologists and other specialists in MDT meetings would enhance decision-making and patient representation. Finally, Mr Osborne touched on the complexities of managing patients with post-surgery swallowing issues and discussed the role of physiology in identifying issues when patients have undertaken overseas surgical procedures (such as a sleeve gastrectomy).

Overall, Mr Osborne's talk highlighted the growing significance of GI physiology in guiding upper GI surgical decisions, and the need for a patient-centred, multidisciplinary approach in addressing these complex cases.

Mr Randall (Consultant Colorectal Surgeon) Gl physiology in people with externalising prolapse

Mr Jonathan Randall, a Consultant Colorectal Surgeon, discussed the role of Gl physiologists in the context of external rectal prolapse during a talk at the South West Gl Meeting. He emphasised the need to consider conservative treatments and investigations before surgery for this condition, which is traditionally seen as a surgical problem. External rectal prolapse, characterised by the full-thickness protrusion of the large bowel through the anal canal, was the primary focus. Mr Randall highlighted that the aetiology of rectal prolapse is diverse, including factors like pregnancy, connective tissue disorders, eating disorders, and substance misuse.

GI physiologists, in collaboration with the surgical team, play a vital role in providing conservative management advice, biofeedback therapy, and guidance on stool consistency, toilet posture, and preventing straining. They aim to address underlying issues and help patients prepare for surgery or explore alternatives. Mr Randall also discussed the potential challenges and limitations of conservative measures, as well as the role of patient engagement and communication in managing external rectal prolapse. Overall, the talk emphasised the importance of a multidisciplinary approach to better understand and treat this condition.

Farewell to Dr Steve Perring!

Emma Jones bid farewell to Steve Perring, acknowledging his remarkable contributions to the field of GI Physiology. She described Steve as a wonderful individual and recounted their years of working together, with Emma revealing that she will be taking over Steve's role in Poole.

Emma highlighted Steve's enduring qualities, including his intelligence, humour, and diverse talents, while recounting their shared laughter and camaraderie over the 16 years they spent together. Steve's distinguished career, commitment to charity work, and adventures, including surfing and steam trains, were celebrated.

Finally, Emma expressed gratitude to Steve for his dedication to the NHS, AGIP, and the South West Meeting Group, and his impact on colleagues and trainees, ultimately congratulating him on his well-deserved retirement.

South West GI Meeting Friday 8th Sept 2023

| 9.00 - 9:30 | Arrival and Coffee |
|---|---|
| | VENUE VENUE |
| 9:30 - 10:00 | Miss McCarthy - Consultant Colorectal Surgeon Seminar Room 17 First Floor |
| 3.50 10.00 | |
| | Anal Fissures: Physiology and Management Learning and Research Building Southmead Hospital |
| | Bristol |
| 10:00 - 10:30 | Prof Reza Nouraei - Gastric Inlet Patch BS10 5NB |
| 10:30 - 11:00 | Miss Rachel Tindle Travelling to Southmead |
| | The OASI Clinic and The Importance of Angrectal Physiology Parking on site in Multistorey, Carpark |
| | Closest Train Stations: |
| 11-00 11-00 | |
| 11:00 - 11:30 | Coffee break Bristol Parkway then 20 min bus ride Bristol Temple Meads then 30min bus ride |
| | |
| 11:30 - 12:00 | Dr Steve Perring |
| | The Role of Impedance in Manometry "What Are We Seeing?" |
| • | |
| 12:00 - 12:30 | Gl Physiology Data Collection Update - Teresa Robinson |
| 12.00 12.00 | |
| A. S. | |
| 12:30 - 13:45 | Lunch/Networking/Equipment Demo |
| | (Sponsored by Medtronic Gastrointestinal) |
| | |
| | |
| 13:45 - 14:15 | Mr Osborne - Consultant Upper Gl and Bariatric Surgeon |
| A CALL | The Role of GI Physiology in Upper GI Surgical Decision Making |
| | |
| 14:15 - 14:45 | Mr Randall - Consultant Colorectal Surgeon |
| *** | GI physiology in people with externalising prolapse |
| | of physiology in people with externalising prolapse |
| 1445 15 00 | |
| 14:45 - 15:30 | Case studies and Discussion |
| Talk and the same of the same | |
| 15:30 - 16:00 | Closing remarks. Nibbles and drinks @ the pub (facilitated by Medtronic Pelvic Health) |
| 17.17.00 | |

Figure 2. Agenda from the South West GI Physiology Meeting

Event Review:

The 26th Annual Association of Upper Gastrointestinal Surgery (AUGIS) Conference: 27th – 29th September 2023

Naomi Rune, Clinical Scientist
Oxford University Hospitals NHS Foundation Trust

The 26th Annual AUGIS Conference was held this year in the Examination Schools at Oxford University, which served as a very grand backdrop to the event. The meeting was hosted jointly with the Dutch Society of GI Surgeons, and it was lovely to have so many international colleagues present.

Although the conference was held over three days, I chose to attend on Thursday 28th September, as this day held particular relevance to my work and interests. On the day I attended, there were five parallel sessions of different professional expertise: Oesophageal cancer;



bariatrics; hepatobiliary; benign oesophageal, and AHP/CNS. The benign oesophageal section was where there were the most talks related to reflux and oesophageal function, so this is where I chose to stay throughout.



Figure 1. The central quadrangle of the Oxford University Examination School

Mr Kirk Bowling, president of the British Benign Upper GI Surgical Society (BBUGSS), mainly chaired the benign oesophageal section. The first session of talks was largely taken up by a 'Hiatal MDT' session. This was a fantastic opportunity to have the input of so many experts discussing these cases. It was pleasing to hear many experts stress the importance of robust manometry and reflux testing for reliable decision making. Many surgeons concluded that there is not always a surgical solution to these problems, suggesting alternatives (including psychological input) to support the patient in their symptoms. It was reassuring to see these views expressed, and demonstrates a considered approach to treatment before committing to anti-reflux surgery.

In between sessions, there was time to admire the architecture and to brows the 'free papers' on display.



Figure 2. First floor Foyer of the Oxford University Examination School

The second session began with a talk titled 'Reflux block – new kid on the block', given by consultant surgeon Mr Nick Boyle. This was my first encounter with this latest development in anti-reflux surgery. The talk was quite encouraging, as patients treated with this device have been reported to experience fewer symptoms of dysphagia and bloating when compared to fundoplication. The device is a spherical ball, placed in the fundus of the stomach laparoscopically. Due to how new the device is, long term relief from symptoms has not yet been thoroughly investigated. However, Bjelovic *et al.* (2020) reports the 1-year outcomes of patients of 50 patients with good results so far.

Mr Vincent Nieuwenhuijs, consultant surgeon from the Netherlands, delivered a talk on PROMS (sadly, this did not involve a chorus of 'Rule Britannia' or Union Flag waving, as in this case 'PROMS' stands for 'Patient Reported Outcome Measures'!). This data is invaluable when it comes to surgeons making the best decisions for their patients.

The last talk of this session was given by Professor Sheraz Markar, one of our resident surgeons at Oxford University Hospitals NHS Foundation Trust. Prof Markar's presentation provided an overview of the GOLF study, a randomised control trial with a cohort of patients from multiple centres across the UK and Europe. The study compares patients who received fundoplication to those who had a LINX procedure at 24 months post-surgery, assessed using the GORD-HRQL questionnaire. This sounds like a valuable and robust study, and I look forward to hearing the findings.



Figure 3. Study design slide from the 'GOLF Study' talk by Prof Sheraz Markar

In the second break, I found time to peruse the commercial stands upstairs, quicky finding my way towards the RefluxStop™ gathering a selection of pamphlets in my eagerness to learn more about the new device. Here, I was able to hold and examine the RefluxStop™ device (Figure 4). I tried demonstrate to size of the device with my hand for scale; although in retrospect, it might appear bigger than it should in my small hand!



Figure 4. The RefluxStop™ device

The third and final session focused on the LINX procedure. The first talk was again delivered by Mr Nick Boyle; Mr Boyle shared his 10-year experience of working with LINX, communicating his expert views on the benefits, caveats and the lessons he has learned in that time.

Mr Dhiren Nehra followed this with an explanation on the safety data gathered from those LINX devices that unfortunately have had to be removed (for example, due to device failure or erosions). It was reassuring to hear the lessons learned from this, and how the information can be utilised to improve surgical procedures for the future.

Finally, Miss Jihene El Kafsi provided an update on the National Hiatal Surgery Registry (NHSR). The NHSR Annual Report (2022) can be found on the BBUGSS website. It was fascinating to see and learn from the data collected, and it was reassuring to know that the details of these surgeries are being so thoroughly and widely recorded to make informed future decisions.



Figure 5. Logo of the National Hiatal Surgery Registry (NHSH)

Attending this year's AUGIS conference was an enriching experience. So much of the work we do as Clinical Scientists and Physiologists helps the surgeons to make informed decisions; it's therefore important to put this into context, and gain an understanding of the surgical therapies that lie downstream in the patient pathway from diagnostics.

It was great to see in the talks how considered many surgeons are in their approach, with many experts keen to evaluate whether non- surgical options should be explored before committing to anti-reflux surgery. After all, as they clearly showed in their talks, especially in the last session, the decision of undertaking of surgery with all its varying outcomes and multitude of long-term effects is not something to take lightly.

References

Bjelović M, Harsányi L, Altorjay Á, Kincses Z, Forsell P; Investigators of the RefluxStop™ Clinical Investigation Study Group. Non-active implantable device treating acid reflux with a new dynamic treatment approach: 1-year results: RefluxStop™ device; a new method in acid reflux surgery obtaining CE mark. BMC Surg. 2020;20(1):159.

Event Review:

Laborie Advanced HRM and Impedance/pH Study Day: 21st September 2023

Elisabeth Kirton, Clinical Scientist Hull University Hospitals NHS Trust

Along with a few familiar faces in GI Physiology, in September I took a trip to London to attend Laborie's "Advanced HRM and Impedance/pH Study Day". The event was easy enough to find, held in the centrally located Woburn House Conference Centre, Tavistock Square. Chaired by Professor Arjan Bredenoord, the event was an excellent opportunity for experienced Upper GI Physiology practitioners to develop their practice and share interesting case studies.

Following registration and coffee, Prof Bredenoord opened the day with his presentation titled "Belching, Rumination, Vomiting". Prof



Bredenoord began by giving a clear explanation of supragastric belching, an unconscious learned behaviour, versus true gastric belching. He emphasised that the mechanism differs from "aerophagia" (excessive air swallowing which can result in excessive air in the intestines, leading to abdominal pain, bloating and flatulence). A fundoplication would not achieve symptomatic relief for patients who are supragastric belching, and speech and behavioural therapy is the treatment of choice.

The presentation continued to discuss rumination syndrome, characterised by effortless regurgitation of recently swallowed food back into the mouth. Using impedance alone, rumination has the same appearance as reflux. However, using manometry, the simultaneous increase in gastric pressure can be observed. A 24-hour pH-Impedance test is not required to diagnose rumination syndrome, although it can help differentiate rumination from GORD. The treatment of rumination syndrome involves making the patient aware of what is happening, and practicing diaphragmatic breathing exercises following meals (to prevent the abdominal contraction causing the regurgitation). Prof Bredenoord concluded the presentation with some patient case studies, showing examples of both supragastric belching and rumination syndrome.

The next presentation was from John Gallagher, a Clinical Scientist here at Hull University Teaching Hospitals NHS Trust. John is currently completing the Higher Specialist Scientist Training (HSST) training programme in GI Physiology, and is carrying out research into the association between oesophageal motility, clearance of reflux and cough. Although heartburn often responds well to PPIs and anti-reflux surgery, these treatments are often not as successful in treating chronic cough. In his detailed presentation, John outlined the latest thinking in chronic cough; that it is a distinct disease

from GORD, but that 'non-pathological' amounts of reflux can act as a trigger for cough. He summarised the proposed underlying mechanism behind a "reflux cough", which is due to vagal hypersensitivity to 'normal' stimuli, arising from proximal reflux aspiration, reflux in the lower oesophagus triggering the oesophageal-tracheobronchial reflex, and micro-aspiration of oesophageal debris. John pointed out that 66% of chronic cough patients have oesophageal dysmotility (including 54% who have ineffective motility). Using ambulatory studies to determine which came first (reflux or the cough) may reveal if anti-reflux surgery will be of any benefit to the patient. If reflux occurs first, GORD well may be the cause of the patient's cough. However, if the cough occurs before a reflux event, it may suggest that GORD is not the cause of the patient's symptom.



Figure 1. Laborie Advanced HRM and Impedance/pH Study Day (photo by Elisabeth Kirton)

Following a coffee break, Jan-Willem van der Wal provided a thorough summary of the Chicago Classification v.4, including the benefits of adjunctive testing (such as a rapid drink challenge to assess lower oesophageal sphincter relaxation, or a solid test meal to look for signs of rumination syndrome). Following on nicely from this talk, Prof Bredenoord returned with a presentation on identifying achalasia and outflow obstruction using the Chicago Classification. Opioid-induced outflow obstruction was also briefly discussed, reminding us of the importance of checking patient medications when reporting oesophageal manometry findings.

In the last session before lunch, John Gallagher returned to deliver a presentation titled "Pitfalls and artefacts". In this engaging and interactive talk, John mainly focused on examples of where a trace may look like a hiatus hernia at first glance; however, these were due to a variety of misleading artefacts, including a vascular impression close to the lower oesophageal sphincter, the patient breathing deeply, and the manometry probe pressing against mucosa. John did a good job at selecting such challenging artefacts to share, that could potentially catch out even an experienced practitioner.

Admittedly, it was agreed that some of these artefacts would be easier to detect during a live manometry test (rather than on a static image).

Following a generous lunch, the day concluded with a series of patient cases submitted by delegates for discussion. As well as prompting interesting clinical discussions, the importance of providing a high quality manometric study was highlighted (for example, performing deep breaths at the beginning of the study to confirm the position of the probe, and removing double swallows from analysis).

I was glad I was able to attend this study day, which was both a useful refresher and learning opportunity, as well as a chance to reconnect with GI Physiology colleagues from across the country.

"It was a pleasure to present at the Laborie Advanced HRM and Impedance-pH Study Day. The study day was a great platform to discuss the latest thinking and research in chronic cough, and challenging / result-altering artefacts. Professor Arjan Bredenoord and Jan-Willem van der Wal presented very thought-provoking talks, which I learned a lot from"



John Gallagher

Are you attending a conference / event?

NewWave is always looking for reviews of GI physiology events and meetings. If you have an event coming up and would like to submit a review, please contact Elisabeth Kirton (elisabeth.kirton@nhs.net)

The next issue of New Wave will be published in January 2024