Welcome

Welcome to the March 2016 edition of NewWave. If you have any relevant articles of papers that you would like to be included in future editions, please email them to steve.perring@poole.nhs.uk

- Please pay particular attention to the call for CPD as highlighted below on Page 3
- Steve Perring has taken over as editor of NewWave. Warren Jackson, the previous editor, would like to thank Philip Waudby for his help over the past 4 years

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AGIP has been working to improve the quality of GI diagnosis for 25 years. Let’s keep supporting the aims of AGIP and here’s to the next 25
**mcompass**

PELVIC FLOOR RETRAINING

**Portable, Easy and Affordable**
- Cost-efficient solution for treating patients suffering with incontinence or chronic constipation
- Portable, wireless system eliminating the need for a cart and dedicated room
- Ability to view anal and rectal pressures simultaneously
- Contains visual biofeedback for patient participation
- Utilises anorectal manometry for detailed results
- Runs four comprehensive tests for pelvic floor retraining

![mcompass image]

Pelvic floor retraining can be an option for both women and men suffering from Faecal/urinary incontinence and chronic constipation. Performing pelvic floor exercises can help strengthen the muscles under the uterus, bladder, and bowel to directly assist with bowel control and urinary leakage. The mcompass gives patients an option to retrain their pelvic floor muscles without the need for more invasive treatments. For patients that do require surgery, pelvic floor retraining may help them maximise their potential to stay continent.

Developed at the world renowned Mayo Clinic, **Mcompass** from **Medspira** is the first ever simple to use Anorectal Manometry device that makes testing of pelvic floor function easy, fast and flexible. This portable System doesn’t even need a dedicated room so it is ideally suited to the practical needs of both NHS and Private Practice.

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**Background to the Biofeedback development**

The mcompass System, with the Biofeedback therapy software, was recently selected by the National Institute of Child Health and Human Development (NICHD) Pelvic Floor Disorders Network to be used in the CAPABLE study (Controlling Anal Incontinence by Performing Anal exercises with Biofeedback or Loperamide). The goal of this randomised placebo-controlled trial, involving seven research institutions, is to learn more about medication and pelvic muscle training treatments for faecal incontinence (occidental bowel leakage). Specifically, this study will compare Pelvic muscle training with drug treatments for faecal incontinence to see if one treatment or both together are better than usual care at improving this condition. The team at Medspira learned a lot about what is necessary for both the clinicians and patients relating to anorectal manometry and biofeedback using manometry.

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For further information and evaluation contact:
email: sales@synmed.co.uk  Telephone: 01992 782570
SynMed Ltd, Synmed House, 7 The Pavilion Business Centre, 6 Kinetic Crescent, Innova Park, Enfield EN3 7FJ
Accredited Independent Practitioners of the Association of GI Physiologists:
CPD deadline covering the period 1st May 2014 to 30th April 2016

It is that time again, when all Accredited Independent Practitioners of AGIP are required to submit their CPD activity to cover the period 1st May 2014 to 30th April 2016. Please be aware that all AGIP Accredited Independent Practitioners must submit their CPD by the 30th April 2016 in order to maintain their status.

Complete the relevant sections within Form 5 – ‘Continuing Professional Development’. All relevant information can be found here:


It is important for practitioners to reflect on any development activity undertaken. A separate copy of the ‘Reflective Practice’ form (pages 4-6) should be submitted for each of the six (3 per year) ‘Reflective Practice’ accounts required for submission.

NB: Each Reflective Practice Account must be signed and dated by the appropriate Line manager (or equivalent senior colleague) and the applicant or they WILL NOT BE ACCEPTED.

Please use the checklist on page 9 to make sure you have completed all the relevant sections before submitting, as incomplete submissions will be returned. Please be aware that the forms must be returned on time or you could be subjected to a late submission fee.

Please send completed forms to:

Tanya Miller PhD SRCS
Principle Clinical Scientist in GI Physiology
Oxford Centre for GI Physiology, Pelvic Floor Services & Research
Block 24
The Churchill Hospital
Old Road
Headington
Oxford OX3 7LJ

Maintaining your CPD and submitting evidence for peer assessment every 2 years is the only route that guarantees your status as an Accredited Independent Practitioner with AGIP.
Forthcoming Events 2016:

6th May 2016  Capsule Endoscopy Study Day
Charing Cross Hotel, (Canterbury Room),
The Strand, London, WC2N 5HX

For further details go to:
http://www.synmed.co.uk/training_capsule_endoscopy_2016_may.htm

21st - 24th May 2016  Digestive Disease Week (DDW)
San Diego Convention Centre, San Diego, California

For further details go to:
http://www.ddw.org/

Liverpool ACC, Liverpool

For further details go to:
http://www.bsg.org.uk/events/bsg-annual-meeting-2016.html

15th-16th Sept 2016  Emerging concepts in the management of faecal incontinence
Barts and London

For further details contact Mark Scott (m.scott@qmul.ac.uk)

15th - 19th Oct 2016  United European Gastroenterology (UEG) Week
ACV, Vienna, Austria

For further details go to:
https://www.ueg.eu/week/past-future/ueg-week-2016/

If you have a meeting upcoming that you would like to be mentioned in a future edition of New Wave, please contact the New Wave editor (steve.perring@poole.nhs.uk) with the details and contact address for booking.
AGIP Guidelines for Oesophageal High Resolution Manometry

Agreed guidelines for oesophageal HRM have been recently reviewed and have been published on the BSG? AGIP website. We would encourage you to check them out. You can find them at the address below:


Equivalence:

What is equivalence?
In the context of education, training, qualifications and experience, equivalence is said to exist when the outcomes of two processes are directly comparable even though the paths to achieving them are different. When equivalence is shown to exist between a new qualification and the qualification or experience a person already has, further education or training becomes unnecessary.

The Academy for Healthcare Science (AHCS) has developed an equivalence assessment process for healthcare science practitioners (i.e. GI Physiologists) and scientists, who have undertaken training, hold qualifications and/or have considerable professional experience, and who wish to show that these are equivalent to the relevant Modernising Scientific Careers (MSC) programme.

In order to demonstrate equivalence an applicant will need to provide evidence that they have the knowledge, skills and behaviours represented by the core standards in Good Scientific Practice and the relevant MSC curriculum outcomes. When a person successfully meets the equivalence criteria they are issued a Certificate of Equivalence. This certificate confers eligibility to apply for appropriate registration e.g. for the Scientist Training Programme (STP), equivalence would provide eligibility to apply for statutory regulation with the Health and Care Professions Council (HCPC) as a Clinical Scientist. More information is available on the AHCS website: http://www.ahcs.ac.uk/equivalence/

AGIP Support / Funding:
AGIP has always encouraged GI Physiologists to undergo the AHCS STP equivalence process, if this is appropriate for you. To help you with your STP equivalence application to the AHCS, AGIP have members who could mentor you through the process (who have gone through the process themselves).

Moreover, we are now pleased to offer funding in relation to the STP equivalence application fee. This will be assessed on an individual basis and funding agreement and must be obtained prior to submission of the AHCS’s application fee. Please contact the AGIP Education Secretary (Barbara Unsworth) if this is something you feel maybe of interest to you: barbara.unsworth@srft.nhs.uk
Clinical Physiologist / Senior Physiologist
Band 6/7*

Hours: 37.5 per week
Salary: £26,041-£40,964 pa
Job Ref: 234-15-S2051

Norfolk Physiology Unit, General Surgery

*BAND 6 or BAND 7 DEPENDENT ON QUALIFICATIONS / EXPERIENCE

The Norfolk and Norwich University Hospital has 1000 beds and serves a population of over 700,000. Located on the periphery of the fine cathedral city of Norwich, we are surrounded by unspoilt and attractive East Anglian countryside, including the Norfolk Broads. The hospital is adjacent to the University of East Anglia with a newly opened Medical School.

The Norfolk and Norwich University Hospital, a major PFI hospital, has on-site all major medical and surgical specialties, with the exception of neurosurgery and Cardiac Surgery (a Thoracic Surgical unit is on-site). The Trust is a recognised Trauma Unit in the East of England and has a walk in helipad.

This rare and exciting opportunity to join our innovative and dedicated team has arisen following retirement of the previous post holder. We are therefore looking for a Physiologist who is eager to progress themselves and the department; support and development will be provided as required.

Nationally recognised, the Norfolk Physiology Unit was established in 1996 and is a specialist centre covering the East of England. It provides facilities to perform anorectal physiology tests, neurophysiological assessment, anal and rectal ultrasound, and anorectal biofeedback; oesophageal manometry, 24hr pH monitoring, combined ambulatory pH/motility monitoring, and gastric function testing; urodynamics, video urodynamics and ambulatory urodynamics. The Unit also hosts Prostate Assessment clinics, flowrate and ultrasound clinics and Continence Advisor clinics for which technical, physiological and some administrative support shall be provided. You will be expected to undertake a range of such investigations and support and train junior colleagues.

As post holder, you will act as a liaison between the various departments who access the Unit (e.g. General Surgery, Thoracic Surgery, Gastroenterology, Cardiology, Respiratory Medicine, Urology, Urogynaecology and Paediatrics) with regard to GI Physiological and Urodynamic investigations, and with other hospitals in the Eastern region requiring access to such facilities.

You will work alongside the Surgical Outpatients Manager who will retain responsibility for the smooth operational management of the unit (i.e. scheduling, waiting list management, effective utilisation etc). Clinical service provision, clinical leadership and supervision provided by the Senior Physiologist.

You will also work intrinsically with the Clinical Lead for the unit and other key clinical stakeholders to continuously develop and enhance the service with a strong focus on governance, clinical appropriateness, patient experience, technological innovation and patient safety.

We would invite interested candidates to have an informal discussion and to come and meet the team when applying. Candidates without management and leadership experience, are invited, and will be appointed at band 6 with an agreed development programme of accelerated progression into the band 7 post.

Requirements:

Band 7:
• Health Care Professions Council Registration in a relevant discipline and/or State Registration with the Registration Council for Clinical Physiologists.
• A degree in a biomedical science, preferably biochemistry/physiology or equivalent
• Accreditation as an Independent Practitioner by the Association of GI Physiologists.
• A leadership qualification would be beneficial, as would a qualification in Health and Safety
• A good general knowledge of human anatomy and physiology but specifically GI and preferably bladder physiology.
Extensive experience, in a hospital environment, of physiological assessment of patients. In particular, experience in both upper and lower GI physiological assessment, and preferably experience with vector manometry, ambulatory manometry, pH monitoring and electrophysiological assessment of the pelvic floor.

Successful completion of an ICS approved Urodynamics Course and training in catheterisation techniques shall be required before urodynamics testing can be undertaken independently.

Band 6:

- Health Care Professions Council Registration in a relevant discipline and/or State Registration with the Registration Council for Clinical Physiologists.
- Registered as a accredited independent GI physiologist with the Association of GI Physiologists (AGIP)
- BSc degree in Physiology (preferably with an emphasis on GI physiology/bladder physiology) or equivalent
- Accredited with UK Continence Society for provision of urodynamic investigations
- Experience as a Trainee Clinical Physiologist (post graduate with a degree in Physiology or equivalent) performing G.I. Physiology tests, with experience in high resolution and impedance techniques an advantage (and if possible, urodynamics including flow rates, cystometry and pressure flow studies) and report writing.
- A good knowledge of gastrointestinal physiology /anatomy. Knowledge of bladder physiology/ urinary tract anatomy would be an advantage, but additional training can be given

For further information please contact Mr Chris Speakman, NPU Clinical Lead, Colorectal Surgeon and Clinical Director / Cursty Pepper, Divisional Operational Manager on 01603 287947 / 01603 289872 or email chris.speakman@nnuh.nhs.uk.

DBS Required: Enhanced  
Closing Date: 29 March 2016

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**STP Trainee Projects**

If anyone has a relatively small project that they would like to perform but are having trouble being able to staff, one possibility is to ask an STP trainee to take the project on. If you have a project that might be worth considering, please send me a brief description to the e-mail address below and I will ensure that it gets passed to the STP trainees or advertised in New Wave.

In the meantime a possible project for an STP trainee could be the one below:

**Comparison of 2 low cost anorectal physiology systems (Anopress from THD and mcompass from Synmed) with full-function high resolution manometry measurement**

If you have a project that you would like to propose or are an STP trainee and would like to take on the project proposed above please e-mail steve.perring@poole.nhs.uk
Research/ Case Study

A review of:

Intraoperative High Resolution Manometry in Laparoscopic Myotomy

By Ishmail Miah

Introduction: Mr Sanchez and I presented this case study at a grand round meeting at Northwick Park Hospital which was then presented as a poster presentation at a conference (the XII National Meeting of the Endoscopic Section of Spanish Association of Surgeons). This short article details the intraoperative oesophageal high resolution manometry (HRM) aspect of the laparoscopic myotomy procedure which in fact is the first reported case using this technique. We may gain new heights in knowledge and clinical benefit in our practice from this case study.

Case Study: This is a case study of a 24 year male who presented with dysphasia in the out-patient clinic. His past medical history and physical examination were unremarkable. His upper endoscopy showed dilated distal oesophagus with semi-digested bolus food and narrowing at the oesophageal-gastric junction (OGJ). His barium swallow similarly revealed a dilated oesophagus with barium contrast hold-up, no oesophageal motility and smooth narrowing of the OGJ. Achalasia was suspected and the patient was referred for oesophageal physiology testing to confirm the diagnosis.

The oesophageal physiology testing was undertaken using a 24-channel water perfused HRM catheter. The catheter did not pass the through the OGJ despite reattempting to intubate the stomach while the patient was swallowing water. This was suggestive of a non-relaxing hypertensive lower oesophageal sphincter (LOS) being present which would explain the narrowing OGJ and residual contents found in the oesophageal body during the endoscopy and barium swallow. Standard 5ml water swallows were performed to assess the oesophageal motility which showed panoesophageal pressurisation with every swallow. This led to the subclassification of type II Achalasia.

Intraoperative HRM Technique: The HRM portable system was transported to the anaesthetic side room to insert the patient's details on the MMS software, attach the catheter channel lumens to the manometry transducers and perfuse water to flush out any air bubbles within the lumens and system. The portable manometry system was then transported to the surgical theatre for calibration. The zero calibration was performed at the level of the patient.

The anaesthetist administered the general anaesthesia (GA) to the patient which prompted the patient to sleep and it was expected for the GA, being a muscle relaxant, to lower the LOS resting pressure and enable intubation. The anaesthetist successfully performed the nasogastric intubation of the HRM catheter approximately to 60cm and the physiologist was able to clearly identify the hypertensive LOS resting pressure. The catheter was slowly withdrawn to 51cm thus placing 1 gastric sensor 5cm below the LOS and placing five sensors (1cm apart) along the OGJ from very proximal fundus to the distal oesophagus. The hypertensive LOS resting pressure remained unchanged during this adjustment and was still reading ≥55mmHg (see figure 1).

While the catheter remained in-situ, the surgeon begun making abdominal incisions to perform the laparoscopic myotomy. During the myotomy, LOS resting pressure was notably reducing (see figure 2) and the surgeon and
physiologist worked together to tailor the length of the myotomy until LOS resting pressure was within normal range, fluctuating between 15-18mmHg, when both surgeon and physiologist were satisfied of an successful completion of the myotomy (see figure 3). In theatre, the intraoperative HRM role contributed additional 7 minutes to the total theatre time. The patient was reviewed on the following day on the ward, then again in 4 weeks and 13 weeks in out-patient clinics where he reported not having dysphagia symptoms or any other postsurgical symptoms (eg reflux, chest pain) during those visits. The patient was eating well and did not warrant any follow-up testing.

**Discussion:** This case study demonstrated that intraoperative HRM testing is a feasible technique to monitor the LOS pressure in theatre/under GA which would not absorb significant theatre time. The technique could be considered if patients do not tolerate the HRM testing in the laboratory settings and eliminates the postsurgical waiting time frame if the patient has myotomy and requires postsurgical HRM testing.

In the surgical practice, the completion of the myotomy would be subjectively relied upon operator’s opinion because intraoperative HRM testing is not normally performed. The introduction of intraoperative HRM would offer objective measures of a successful completion of the myotomy in multiple folds: i) intraoperative HRM tailors the adequate length of the myotomy thus preventing post surgical dysphagia from an ineffective myotomy, ii) it may avoid performing excessive or extreme myotomy that may cause damages to the LOS and risk developing post surgical reflux disease and iii) the intraoperative HRM testing technique may provide medico-legal evidence of adequacy and success of a myotomy.

![Figure 1, Preoperative GOJ pressures showing hypertensive pressures (≥55mHg)](image)

If you have some interesting research or an interesting case that you would like to share with the AGIP community in a future edition of NewWave, please contact me at steve.perring@poole.nhs.uk
Figure 2, Showing GOJ pressure changes during myotomy

Figure 3, Showing GOJ pressures to be normal post-operatively (15 mmHg)