Connect

Tallaght University Hospital | Ospidéal Ollscoile Thamhlachta

An Academic Partner of Trinity College Dublin

Quarterly Newsletter for GPs

Autumn 2021 - Issue 23

Dear Colleauges

As the leaves change colour we are I have no doubt heading into a very busy Autumn / Winter period. We have seen little relief in the summer months with the number of attendances to the Emergency Department.

We also continue to have very high numbers of COVID patients requiring care, this is due in part to the lower level of vaccination uptake in the community. We would greatly appreciate your ongoing efforts to encourage patients to take the opportunity to get the COVID-19 vaccination.

The high numbers that continue to present and require admission is impacting on patient flow and we must continue with restricted visiting until the incidence of COVID drops.

In the absence of life fully returning to normal I am delighted to see our colleague's in Age Related Healthcare producing our first podcast series with the support of the Adelaide Health Foundation focussing on the topic of Safer Mobility. The series is a very easy and educational listen and I hope will be of use to many carers and members of our wider community.

Please pass the details of the Let's Talk About safer mobility podcast detailed below on to any patients you believe might benefit.

The Hospital has also been involved in organising the Tallaght Community Health Awareness Month, another example of being creative in planning health information events in place of the regular Fettercairn Health Fair.

Kind regards

Lucy Nugent
Chief Executive
Tallaght University Hospital

Transperineal (TP) Ultrasound Guided Prostate Biopsies

Almost 4,000 men are diagnosed with prostate cancer each year in Ireland. This means that one in seven men will be diagnosed with prostate cancer during their lifetime. The urology and pathology teams have recently introduced a new prostate biopsy service to TUH in order to aid detection of prostate cancer. Like all cancers early detection is key to better outcomes for patients.

The technique is called "transperineal (TP) ultrasound guided prostate biopsies" and is an additional service to the current transrectal prostate biopsy service offered by the Urology Dept and the excellent MRI/Ultrasound fusion transrectal biopsy service provided by the Radiology team. The decision to perform TP biopsy is made through the MDT (multidisciplinary team meeting).

TP biopsies currently require a general anaesthetic (GA) for approximately 30 minutes and are performed as a daycase in the main theatre. The aim is to move towards sedation in the Reeves Day Surgery Centre and then finally local anaesthetic in the Urology Outpatient Department.

At the moment, most biopsies are done using the transrectal ultrasound-guided (TRUS) technique. This is where the needle goes through the wall of the back passage (rectum). However, it is becoming more common for a transperineal (TP) technique to be used. This is where the needle goes through the perineum, which is the skin between the testicles and the back passage.

The main advantage of the TP techniques is the reduced risk of developing sepsis. More biopsies can also be taken via this route under anaesthesia enabling the surgeon to get more thorough sampling of larger prostates.

The procedure takes 30 minutes and is tolerated well. All patients go home the same day and are followed up in specialist clinics with the biopsy results. This new service will improve the quality of care to patients by improving prostate cancer diagnosis. Furthermore it will reduce the number of repeat procedures potentially required in some men by providing better targeting of abnormal areas in the prostate. Finally it will enable quicker access to prostate biopsies than currently exists through the day ward.

Mr. Rowan Casey, Consultant Urologist training Urology SpRs in the TP biopsy technique

SPOTLIGHT

Rapid-Access Giant Cell Arteritis Clinic

Giant Cell Arteritis (GCA) is a disease which causes inflammation of large arteries, potentially leading to permanent blindness and stroke. Early diagnosis prevents these catastrophic complications by allowing for earlier and more appropriate treatment to be started.

Diagnosing GCA involves performing a temporal artery biopsy (TAB), which has many inadequacies, but in recent years temporal artery ultrasound (TAUS) has become a viable alternative. TAUS is timely, non-invasive, cost-effective and leads to improved patient outcomes. GCA can be diagnosed on ultrasound by visualising the 'halo' sign (Fig. 1) surrounding the vessel lumen which is non-compressible when transducer pressure is applied. The halo represents a swollen vessel wall as a result of inflammation.

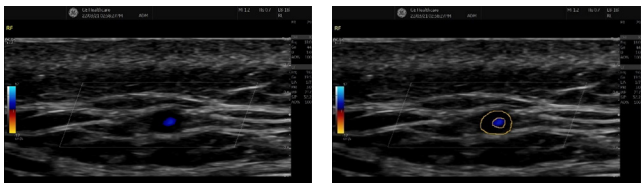

Figure 1. Temporal artery 'Halo'. Left: as it appears during scan. Right: area between yellow lines represents the Halo.

In August 2020, Dr. Colm Kirby and Professor David Kane in the Department of Rheumatology, established Ireland's first clinician-sonographer-led Rapid-Access GCA Clinic (TUH and replicated this in Cork University Hospital (CUH) as part of a CUH/TUH research collaboration.

While providing a more streamlined pathway for this group of patients was the main goal, research is being undertaken on these patients with the aim of establishing the validity of ultrasound (US) in this disease. In the past year, 127 patients have been assessed in our clinic and we have shown TAUS (positive in 89% of cases) to be substantially more sensitive for diagnosing GCA than TAB (positive in 41% of cases).

Rapid-Access GCA Clinic Referral Criteria	Age → 50 years with ESR → 50 mm/Hr or CRP → 10 mg/l
	AND
	Symptoms/ Signs suggestive of Giant Cell Arteritis

Table 1: Clinic referral criteria.

This year, the reach of the clinic has been expanded to facilitate GCA diagnosis in patients presenting to St. James's Hospital, The Mater Misericordiae University Hospital as well as primary care. The TUH Rheumatology Department has established a curriculum for training current and future rheumatologists in the realm of vascular ultrasound. Going forward, the intention is to have at least one competent clinician/sonographer working in rheumatology in each hospital region who could emulate the service that has been developed in TUH. If you would like to read more about this initiative you can click on this link, referencing pages 60-61.

Let's Talk About Safer Mobility

Let's talk about safer mobility is a new TUH Podcast series, the first for the Hospital, it is targeted at the older members of our community and their carers, whether that is inside or outside of a home setting.

The Hospital will upload one episode each week on the Hospitals' YouTube Channel, iTunes, Podbean and the TUH Hospital website finishing on November 4th.

The six part podcast series produced with the support of the Adelaide Health Foundation looks at safer mobility and the various things that can affect our mobility as we age.

Commenting on the series, podcast host Dr. Paul McElwaine, Consultant Geriatrician said "With COVID restrictions still impacting outreach to our community and the ability to do health talks we hope this podcast series on Safer Mobility will provide some useful and helpful advice to people on safer mobility. I am very grateful to the Adelaide Health Foundation, the Centre for Learning & Development, TUH Communications Dept and my colleagues from across various medical services in the Hospital for the support they have provided in making this series.

It was a very new experience for all of us but one we enjoyed which I know will be of benefit to our patients, their carers and the wider community."

Dr. Paul McElwaine host of the Lets talk about safer mobility podcast series

Electronic Vital Signs for Patients Introduced

Taking the vital signs i.e. temperature, oxygen saturation, heart rate/pulse and blood pressure of patients is a vitally important part of their care. Hospitals use the National Early Warning Score (NEWS) which is a guide that determines the degree of illness of a patient and determines how often their vital signs need to be checked.

A change in the NEWS can indicate early detection of infection or sepsis, and an increase of the score prompts medical review. Previous studies have shown that staff can make errors when manually calculating the EWS, this can lead to delayed or inappropriate escalation of patient care.

Earlier this week TUH became the first Model 4 hospital in the country to rollout Vital Signs Automation. Starting on Osborne Ward the new electronic system improves accuracy of vital signs recording and automatically calculates the Early Warning Score.

The project is being undertaken in partnership with the HSE digital transformation team. TUH was awarded an 'Our Public Service' innovation award to assist the delivery of this project.

Pictured from left to right are Dr. Natalie Cole, Head of Innovation; Prof. Martin Curley, HSE Director of Digital Transformation; Elsamma Philip, Clinical Nurse Manager on Osborne Ward; Dr. Hannah O'Keefe, Innovation Registrar and Mary Hickey, Quality Improvement Lead

Hospital to Cut Carbon Emissions with a New Energy Performance Contract

The Hospital have entered a new energy performance contract with Centrica Business Solutions which will deliver guaranteed savings of almost €1M in energy expenditure per year and see a capital investment of over €6m. Overall the scheme provides for a 70% drop in grid supplied electricity, a 20% saving on electrical consumption and a 26% reduction in carbon consumption!

The 15 year contract was awarded following a competitive public tendering process which will see significant investment in the Hospital's aging infrastructure, reduce energy consumption onsite and reduce the organisation's carbon footprint.

The contract will include an upgrade of the Hospital's heating network, incorporating a combined heat & power system, replacement of heating pumps and steam boilers, the upgrade of the Building Energy Management System, which is the back bone to the management of the installed mechanical equipment onsite, replacement of campus lighting and refurbishment of the air handling units in Theatre.

Pictured from left to right at the announcement were Seamus Foran, Head of Project Management Office TUH; Shane Minehane, Head of Business Operations Centrica Ireland; Lucy Nugent, Chief Executive of TUH; Edel Wyse, Director of Carbon & Energy Ireland Fund; Dermot Carter, Director of Finance, TUH and Ciaran Faughnan, Director of Facilities & Estates at TUH

Acute Oncology Service

Just over 1,200 patients attend the Oncology & Haematology Day wards per year, mostly attending for anticancer treatment. Whether it be chemotherapy, immunotherapy, target therapy or oral cancer medication, all these patients need support.

Following a four month period a service evaluation was completed of the new service which clearly illustrated the positive difference the introduction of an Acute Oncology (AO) Clinical Nurse Specialist has made to patients in keeping them safely at home, reducing acute care visits to the ED and Oncology / Haematology Day wards. The role for AO CNS Dawn Whelan began one year ago this month, providing telephone triage support to patients at home undergoing active treatment.

The service evaluation, completed over a four month initial period which showed 39% of all calls resulted in a presentation avoidance. This means that fewer patients attended TUH for review or ED as they were assessed and managed over the phone. These patients received a call back from the AO CNS to follow up any issues or problems that occurred since the initial call. The most common symptoms reported are pain, fatigue, nausea and decreased appetite. Providing self-care advice and reassurance was the main outcome for patients who contacted the AO service. There were 45 patients who attended ODW/ HDW for review between December 2020 – end of March 2021. Of these patients, 19 were admitted and 26 were treated and discharged home on the same day. They all received a follow up phone call on discharge from the ODW/HDW.

Feedback from patients for the service has been extremely positive, the patients feel they are being listened to and most importantly trust the advice provided. The Acute Oncology Service runs Monday to Friday from 7:30am to 4pm.

Dawn Whelan Acute Oncology Phone Triage Clinical Nurse Specialist

"Thanks you for all the advice and information you give to me. It was very helpful and made the time of chemo much easier. Thank you for the phone call after the chemo and advice and professionalism. It gave me more confidence and I knew all the time I was not alone and that I could ask for help and get it"

Research at TUH Contributes to Global Study

Last month there was a significant research publication on 'Understanding the variability in responses to COVID-19 illness in older adults' in the highly influential Science Immunology publication.

This published work is a truly global collaborative effort led by Paul Bastard and JL Casanova from the Imagine Institute, Paris and the Rockefeller University, New York with Ireland one of 38 countries across all continents represented in this study.

This paper identified and reports on a key factor (neutralising auto-antibodies to an important immune Mechanism- type 1 interferon immunity- which is critically important for protective immunity in SARS-CoV-2 infection), which explains why COVID-19 has severe and fatal consequences in some people (especially older persons) but not others.

The Irish contribution to this global research effort came from the inclusion of older individuals which were part a larger programme of research at TUH and TCD. The NH-COVAIR project is a longitudinal investigation of COVID-19 in Irish nursing home residents, examining the relationship between frailty, Clinical outcomes, immunophenotype, and vaccine response in nursing home residents. The ongoing NH-COVAIR study, is led by Dr. Adam Dyer, Professor Seán Kennelly and Dr. Nollaig Bourke and aims to explore these responses further over the course of the next few years. This research emphasises the need to include older people and those with advanced levels of frailty in basic scientific research.

This novel study has recruited just under 100 nursing home residents in nursing homes affiliated with Tallaght University Hospital and is generously supported by a grant from the Meath Foundation. It is the first study internationally to focus on this population in particular.

The inclusion of this information into the larger global study is vital as older adults, and particularly those residing in nursing homes, are frequently excluded from research based on age or medical co-morbidity. This study, by demonstrating the striking increase in these autoantibodies after 70 years of age, emphasises the need to not only include older adults in immunology research, but the need to study the variability in immune responses in older adults and in particular in those living with frailty, such as nursing home residents. By excluding older adults from research, this could mean the opportunity for key discoveries about immune system variability is lost.

Key Findings of the Research

- Auto-antibodies neutralising type I interferons (a key immune defence mechanism) are present in 4% of adults aged 70 years or older and may account for up to 20% of COVID-19 deaths.
- Auto-antibodies are capable of neutralising the body's own interferon anti-viral response.
- Auto-antibodies sharply increase after the age of 70 years.

A full copy of the research paper can be accessed via this link

RespiraSense

On September 29th a new pilot of RespiraSense started on Lynn and Ruttle wards. RespiraSense is a device that gives motion tolerant, accurate, continuous respiratory rates.

The respiratory rate can often be the first vital sign to herald a deteriorating patient. Current manual measurements are subjective, whereas this technology facilitates an accurate objective measurement. We hope that RespiraSense will help us to improve patient outcomes by detecting deteriorations and therefore enabling intervention at an earlier stage.

We are piloting this technology for six months at which point we will examine the benefits to determine continued usage. The criteria for use is available on the wards and includes patients with a raised INEWS score or with concern for sepsis, patients on oxygen or non-invasive ventilation, and patients with COVID-19.

As well as providing a more accurate respiratory rate calculation for inclusion in the INEWS score, iPads with continuous trends of respiratory rates for patients on the device will be available for review by teams on ward rounds and by on call staff.

This follows on from the recent implementation of the Vital Signs Automation technology on Osborne ward. This is another project supported by our partnership with HSE digital transformation and another example of the implementation of technology in TUH to support patient monitoring.

Pictured from left to right on the day RespiraSense was introduced to TUH Jane Dillon, CNM1, Lynn ward; Flo Lambert, CNM2 Lynn Ward; Emma Gilligan, CNS for PMD Solutions; Kerry Daniels, Student Nurse and Karen Geraghty, CNM1 Ruttle Ward

1st Birthday

Approximately 1,400 patients a year are referred to the TUH ED by their GP with chest pain. Another circa 900 self-refer. The vast majority are very low risk and therefore are subjected to lengthy waiting times in the ED.

To provide a better service to these patients and a successful application to the Sláintecare Integration Fund, the new 'Integrated Community Chest Pain Clinic' started one year in the Russell Centre recently.

The clinic builds on the existing best practice in chest pain assessment already provided by the nurse-led chest pain service in TUH, aiming to shift the focus of care from the Emergency Dept. to the community. In the first year of this service, the only type of its kind in the country have delivered over 700 episodes of care.

There were 460 Referrals received from 122 GP Practices and a 15% reduction of GP referrals to TUH ED with chest pain. Happy Birthday to the team involved in this successful innovation.

Pictured from left to right Eoin Power, Medical Directorate Operations Manager; Margaurita O Brien, ADON; Shirley Ingram, Advanced Nurse Practitioner Cardiology; Dr. David Moore, Consultant Cardiologist; Maeve Kane, ICCPC Administrator and Donal O'Dea Senior Cardiac Physiologist

Calling on all Cyclists

TUHF is calling on all cyclists and enthusiasts to join our sports ambassadors in the TUHF Virtual Cycle Race around the world, throughout the month of November. All funds raised will go towards a Sensory Room in our Emergency Department.

Running from the 5th-28th Nov, you can sign up to one of four teams; the Rugby team captained by Irish international and our nursing colleague Linda Djougang; the Soccer team captained by Shamrock Rovers star Neil Farrugia, the GAA football team captained by multiple All-Ireland winner James McCarthy or the hurling team captained by Leitrim and Thomas Davis star Zak Moradi. There are incredible prizes to be won, including a European Cycling Holiday worth €2,000!!

Whether you're at home on your exercise bike or out on the roads, it's simple. Sign up via the website www.tuhf.ie/cycle. Staff members can sign up for €15 only. When you sign up you will be prompted to set up your individual fundraising page on iDonate. There you can iintegrate your favourite fitness app so you can track your kilometres as you cycle them (details on the website) and see the progress you are making around the world. **Please Note:** To make sure you are in with a chance to win our top prize you must track your kilometres cycled through iDonate, or else they won't be counted!

If you can't take part or aren't the cycling type, please consider supporting your cycling colleagues by donating kilometers to your preferred team to help them reach their next milestone, edge their team ahead and even win the race. So, saddle up, sign up and let's get started. www.tuhf.ie/cycle

If you would like any more information about any articles in the Connect or have suggestions for future editions please do get in touch

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