# TRAINEE EYE



ISSUE 17 | AUTUMN 2022





The Faculty of Intensive Care Medicine In this issue

THE SHUGGIE BAIN EFFECT IMG TRAINING CHALLENGES PAINTING AN

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# **FFICM EXAM CALENDAR**

**Managing Editors:** 

Mr James Goodwin

Ms Anna Ripley

FFICM FINAL MCQ				
Exam applications open	Monday 26 September 2022			
Exam applications close	Thursday 24 November 2022			
EXAM DATE	5 January 2023			
Fee	£535			
Results	30 January 2023			

### r FFICM FINAL OCSE/SOE Exam applications Monday 12 December 2022 r Exam applications Friday 3 February 2023

close		
EXAM DATE	20-23 March 2023	
Fee	£665 (both) £370 (OSCE) £335 (SOE)	
Results	19 April 2023	

### **Your Lead Trainee Representative**



**Dr Cat Felderhof** FICM Lead Trainee Representative

In the latest edition of Critical Eye I wrote of the impressive achievements and capabilities of pre-CCT intensivists and I believe we have a vast array of cognitive diversity (which partly comes with demographic diversity) associated with that. have tried to reflect this variation of perspectives in this edition of Trainee Eye. Our articles include a clinical case about an adverse reaction to Covid vaccination (a thankfully rare occurrence); Mark Tan has written of his experiences communicating with families during the pandemic using his art history knowledge to put his own personal slant to it; a group of StRs in London demonstrate what can be achieved by doctors in training with a narrative about their set up of a critical transfer team; Bhaskar Narayan has written a very motivating account of his time in Melbourne on a post CCT fellowship; the talented Faye Selby has drawn a great pictorial depiction of ICM night shift; and Helen French was inspired by

A couple of years ago I read and was inspired by the book *Rebel Ideas*: *The Power of Diverse Thinking* by Matthew Syed, if you haven't come across it then it's well worth a read. In his own words: "Diversity is the critical ingredient driving what we might term collective intelligence". During the course of the book he examines not only "demographic" or "identity diversity" but also "cognitive diversity" — the differences in perspective, insights, experiences and thinking styles.

> reading the Booker Prize-winning novel *Shuggie Bain* and has written about how this has impacted her working life in Glasgow.

The inaugural meeting of the FICM StR Sub-Committee was held on 9 June 2023. The group consists of myself and Matt Rowe, as Chair and Deputy Chair; four co-opted members giving four nation representation: Emma Jackson (Chair ICS TAG Committee), Helen French (Chair SICS Trainee Committee), Sarah Elgarf (WICS Trainee representative), and Graeme McCracken (NI Trainee Representative). We were also able to appoint five members recently through an anonymised appointments process: Sofia Hanger (Dual/Triple ICM and Medicine Representative), Tae Lee (Dual ICM and Anaesthetics Representative), Catherine Ward (Dual ICM and EM Representative), and Gareth Thomas (Single ICM Representative). We had a very productive and positive meeting with plenty of ideas for practical

projects we can take forward to improve the ICM training experience. The Sub-Committee members have kindly provided a short bio for inclusive in this edition of *Trainee Eye* so that you can become familiar with who they are.

We have recently made the decision to further expand this group by adding a representive from the International Medical Graduate community. Bringing this viewpoint to the table will be invaluable and will again enhance the diversity of opinion at the table. Please do consider putting your name forward if you are part of this cohort of ICM StRs, we're a welcoming and friendly group.

The development of *Trainee Eye* is one item on the agenda for the StR Sub-Committee and I hope we can continue to display the ICM StR diversity with a variety of contributors and articles. If you would like to submit an article for consideration then please send it to <u>contact@ficm.ac.uk</u>



### Your Deputy Trainee Representative



Dr Matthew Rowe FICM Deputy Trainee Representative

### TRAINEE REPRESENTATIVE ELECTION 2022

The next round of Trainee Representative elections will run in December 2023. Visit the link below for more:

> https://www.ficm.ac.uk/ficmtrainee-representativeelection-2022

It seems appropriate that I open my first article in *Trainee Eye* with an acknowledgement of the enormous contribution that Cat Felderhof has made to improving the lives of trainees in Intensive Care Medicine. During her year as lead FICM trainee representative Cat has dedicated a vast amount of time and effort to various projects with the sole intention of ensuring the trainee voice is not only heard but acted upon for the benefit of trainees across the country.

### StR Sub-Committee

Perhaps most notably, this includes the creation and development of the new FICM StR Sub-Committee, which has enjoyed its first two meeting this year. I want to thank her both personally, for guiding me through my year as Deputy Trainee rep and on behalf of ICM trainees as a whole, who undoubtedly will benefit from the work she has put in behind the scenes. Having gained her CCT, I have no doubt she will continue to work hard in the best interests of trainees as she gets used to being a consultant.

### The big picture

As I prepare to come to terms with the fact that I'm about to become the lead Trainee Representative in January and the ever-daunting task of attempting to fill the very large void that Cat will leave behind, I find myself reflecting on the events of the past year or so. In the 'post-pandemic' era trainees in ICM continue to meet some considerable challenges, all in the context of a level of exhaustion not felt previously in the specialty.

In my election statement I spoke of wanting to keep pragmatism at the forefront of the Faculty's approach to training. I was once told by a consultant mentor that there were many kinds of intensivist and that I was a 'Big Picture Intensivist'. Initially, I took this to mean that I acted with broad brush strokes and perhaps neglected the fine detail on occasion. However, since then I have chosen to interpret this feedback as a means of being able to "see the wood for the trees" whilst having insight into a need to remind myself to examine the fine detail.

### A pragmatic approach

It is this approach I would like to take into my coming year as lead Trainee Representative. With curriculum changes, new portfolios and concerns with the recent FFICM examinations I believe a pragmatic approach is going to be crucial in ensuring training is kept fair, high quality and rewarding for trainees.

As a specialty, we are lucky to have an extremely diverse and talented cohort of future intensivists and I look forward to working with many of you over the coming year in representing your interests. I hope I can do you all justice.

### Your new StR Sub-Committee

The applications received for places on the new StR Sub-Committee were of exceptionally high quality. Our thanks to all who applied. Below, you can meet some of the members of the newly formed Sub-Committee.

**Dr Sarah Elgarf** Chair of the Welsh Intensivists in Training Society

Hi, I'm Sarah, an ST6 dual Intensive Care Medicine and Anaesthesia trainee in South Wales. I am current chair of the Welsh Intensivists in Training Society.

I graduated from the University of Birmingham in 2010, moving to South Wales a few years later to undertake Anaesthetic training and then Intensive Care Medicine.

Having been through several curriculum and portfolio changes, and juggling training with young children, I am familiar with many of the complexities trainees can have.

I endeavour to use my experience to support our team and here to readily receive your training queries/concerns/suggestions and work on achieving solutions through representation at the Specialist





#### **Dr Helen French** Chair of the Scottish Intensive Care Society Trainee Committee

I'm a dual trainee in ICM and Anaesthesia in the West of Scotland. I grew up and mostly trained in the North West of England and came to Edinburgh for Core Anaesthetics in 2015.

I love living and working in Scotland and I am now settled living just outside Glasgow.

As chair of the Trainee Committee of the Scottish Intensive Care Society I was delighted to join the FICM StR Subcommittee as a co-opted member. This is a fantastic initiative to engage with ICM trainees and I am keen to represent trainees in Scotland as best I can.

#### **Dr Sofia Hanger**

Dual/Triple ICM and Medicine StR representative

I graduated from the University of Bristol in 2013, returning to London for my post-graduate education and am currently a dual intensive care and respiratory medicine trainee. I have previously been regional representative for core medical training in North West London and am currently the associate RCP college tutor at my hospital. I am keen to help the views of trainees be heard to continue to enhance our training experience.

Outside of medicine, I enjoy almost any sport that involves being outside and spending time with family and friends.





#### **Dr Tae Lee** Dual ICM and Anaesthetics StR representative

Hi I'm Tae — I'm an ST5 in the Mersey deanery and your dual ICM and Anaesthetics StR representative. I have experience in both education as an Associate Clinical Teacher for the University of Liverpool and representation as regional ICM STEC representative and my role as the RCP chief registrar at the Royal Liverpool Hospital.

In the last couple of years enormous challenges have been staked against our training needs, professional development and mental wellbeing. As your representative, I want to ensure all our voices and concerns are heard, fed back swiftly, with every effort being made to provide tangible solutions for us. Representing you guys is a privilege and I will do my upmost that the efforts and sacrifices that our group have made to continue doing what we do are recognised and supported.

### Dr Helen McKenna

Academic & LTFT StR representative

I am a dual anaesthesia/ICM trainee in the South West deanery, and as an NIHR academic clinical fellow at the University of Plymouth, I hope to represent academic and less-than-full-time trainees on the ICM programme.

My priority for the role is to identify the ICM trainees with research positions across the country and provide a forum for us to share experiences and identify issues specific to academic ICM training.



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#### **Dr Emma Jackson**

Chair of the Intensive Care Society Trainee Advisory Group

Dr Emma Jackson is an ST7 Intensive Care Trainee in the Northwest. She has undertaken a fellowship in ECMO and cardiac intensive care during her training. Along with her cardiac interests she has a keen interest in the humansiation, follow up and long term rehabilitation for intensive care patients highlighting that there is always 'a person behind the patient'. She currently chairs the Trainee advisory group for the Intensive Care Society as well as sitting on their Standards and Guidelines committee, where she has led on the development of several guidelines. She is also the trainee representative for the association of northwest intensive care doctors.





Dr Gareth Thomas Single ICM CCT StR representative

I am a single specialty ICM trainee in the Mersey region. Originally, I began dual training with Emergency Medicine and made the decision to continue as single specialty last year. I have a particular interest in education, especially technologically assisted, and run the FICMlearning podcast (yes, FICM has a podcast which is available on all major podcast services). I believe the single specialty pathway provides an opportunity to trainees to explore a more diverse career long term.

I live in North Wales with my wife and three daughters and spend as much

#### **Dr Catherine Ward**

Dual ICM and Emergency Medicine StR representative

Hi, I'm Cat Ward, Stage 2 dual EM/ ICM in the West of Scotland. Scots/ Scouse, mum to a perpetually snotty toddler and border terrier with a crocs fetish.

Dr Graham McCracken Trainee Representative for Northern Ireland







### **Dr Helen French**

Chair of the Scottish Intensive Care Society Trainee Committee

# Healthcare in Scotland: the Shuggie Bain Effect

"The Glasgow Effect" is a term used to describe the higher levels of mortality and morbidity experienced by the people of Glasgow, even when adjusting for socioeconomic deprivation. I moved to Glasgow five years ago, straight into the West End. What did I, a "doctor from the Byres Road", as one of the characters in *Shuggie Bain* so adeptly put it, know about the history of this city and its people, and how could I understand the factors that influence health and illness here?

While I am not suggesting that you can equate a lived experience with reading a novel, reading this book goes some way to exploring the issues experienced by many in a particular place at a particular time. *Shuggie Bain* is a Booker prize-winning novel by Douglas Stuart, based on his childhood in Glasgow. It is worth noting that this novel is a difficult read and some may find it emotionally very challenging.

### Daily life

We meet Shuggie as a 16-yearold living in a bedsit in the South Side of Glasgow in 1992. The motions of Shuggie's daily life are rendered in nauseating, unforgiving detail from the start, as we see that the adults surrounding Shuggie range from neglectful to physically abusive and in some instances, sexually abusive.

The novel then veers back to 1981, with Shuggie's mother Agnes Bain hanging out of a window in a high rise flat in Sighthill while her mother and friends smoke and drink inside. The evening is running on alcohol, cigarettes, gambling and buying clothes "on tick" from the Freemans catalogue. Unemployment is high, with the characters "rotting into the settee for want of decent work". Agnes is full of hope and enthusiasm, aspirational and house-proud. She has a special bond with her youngest, Shuggie, but as she becomes increasingly dependent on alcohol, she is blind to how much he needs her.

### Self medication

Many characters self-medicate to deal with the circumstances of their lives, circumstances that are often out with their control. At times the novel is incredibly dark, at times we see some hope. Shuggie's devotion to his mother is heartbreaking and at times sweet, for example when he replies to the suggestion that she is a working girl: "She's never worked a day in her life, she is too beautiful!". Shuqqie is desperate to find understanding in the adults and other children around him. He is subject to both blatant and implied homophobia, although finds a kindred spirit in a friend later in the novel, in a rare upbeat moment. No one reports any child protection concerns about Shuggie, and terrible things happen to him again and again.

### **Historical events**

The historical events of 1980s Scotland are subtly woven into the text; in a scene from the perspective of Shuggie's taxidriver father, also called Shug, a drunken passenger talks incoherently about "Thatcher and union and bastard" and his next fare's husband is out of work after "Twenty. Five. Years. Out at the Dalmarnock Iron Works, and all he got was three weeks wages." She still tips and Shug observes "Those with least to give always gave the most".

### Practiced calm

There are many fond references for locals; Glasgow Royal Infirmary comes up more than once in the novel, as somewhere for "football stabbings and giro domestics" whereas the old Stobhill is quieter; described as somewhere to be born and somewhere to die. There's a chapter set in a ward of the Royal featuring a nurse with a masterful approach to palliative care, who handles an inebriated Agnes with practiced calm. For those who aren't local, there will still be plenty to recognise in these stories, especially now with the cost of living rising so rapidly and so many people struggling once more.

This is a sad book, a moving book, and a devastating period piece. I drove through Sighthill the other day. The building where Agnes lived with her parents and children was demolished in 2013. Without reading this book I wouldn't have known it was ever there, and for children like Shuggie that is exactly the problem. 10 | Trainee Eye | Autumn 2022

DEVELOPMENTOF ANADULT CRITICAL TRANSFER SERVICE: Optimising training opportunities during the pandemic

Recently we were humbled and honoured to be presented with the highly prestigious RCOA Humphry Davy award for our work in establishing a dedicated adult critical care transfer service during the COVID–19 pandemics.

The North Central London Adult Critical Care Transfer Service (NCL ACTS) was noted not only for the aid it provided to the London Critical Care Network, but also for the innovative personal and professional development possibilities it offered trainees during a period of chaos and limited educational opportunities. In this article, we wanted to share our story of service development, training adaptation and advocate for the exciting clinical, management and leadership opportunities that transfer medicine can provide.

### All hands on deck

In early 2020, we watched our intensive care units start to fill with patients suffering with the once unheard-of respiratory virus; however, by April of that year COVID was firmly part of our vocabulary and indeed had taken over every aspect of our working and personal lives. At work, it was all hands on the critical care deck: working in a large teaching hospital we felt lucky to be in a hospital that had the ability to upscale capacity to previously unimaginable numbers. As patients filled the intensive care unit, reports were coming in of smaller units exceeding capacity and at risk of collapse under the strain of patient admissions. Our critical care network agreed upon a plan to decompress and distribute the burden of patients.

On a gloomy April Monday our clinical lead along with two senior trainees proposed the development of a new dedicated regional critical care transfer team (NCL-ACTS). By Thursday we were in the back of an ambulance en route to transfer our first patient from an overwhelmed district general hospital to one of the newly designated surge centres. Through the pandemic waves and many months of operation, NCL-ACTS has now grown into a well-established, efficient and integral team for our sector. We have completed over 750 patient transfers across not only the north central London sector but also nationwide. The story of the service's evolution is one which demonstrates trainee-driven development to not only meet a clinical need, but also provide management, education and leadership opportunities.

### Team structure, development & daily operations

At its conception, NCL-ACTS was dependent on volunteer staffing, but as the demand for the service grew, so did the structure and workforce. We now operate a daily dedicated specialist team which includes an airway competent doctor and a transfer practitioner (critical care nurse, ODP or A&E nurse) who work alongside a paramedic/ EMT from the London Ambulance Service. The daily coordination of the service is undertaken by a

single point-of-contact: the Duty Operations Manager (DOM). These DOMs are senior anaesthetic and intensive care trainees with ample transfer experience and familiarity with the workings of our service. The DOM attends daily regional meetings along with a range of key stakeholders to assess the needs of the sector and, serves as a coordination hub to align the service to the sectors' needs through receiving and triaging referrals, coordinating the clinical team, answering transfer related queries and providing senior level clinical advice. DOMs also escort the team on high risk and complicated transfers ensuring support of the clinical team. Under remote consultant supervision, this model utilises the skills and experience of dedicated senior trainees to deliver an efficient, safe and economical service.

Currently we have a workforce of over 50 anaesthetic and critical care trainees and 70 transfer trained nurses. The recruitment, onboarding and HR requirements are managed by our senior trainees, who work closely with the management team in critical care, the locum bank and senior nursing staff to provide a high-quality skill mix. We have also established and secured novel fellowship posts to maintain cost-effectiveness, continuity and provide in-depth training opportunities.

NCL ACTS clinically operates using a flat hierarchy to create an open culture with patient safety at the centre. As such, all improvement initiatives, training opportunities and managerial tasks are open to any motivated member of the workforce. The expanding workload necessitated a leadership team to

steer not only the clinical service, but also the governance, research, education and training, equipment and workforce branches of the services. Working collaboratively with two consultants, these leadership roles have all been pioneered by senior trainees. Complementing and enhancing the team, the senior leadership team further includes two nursing leads and a dedicated fellow in transfer medicine to drive improvement initiatives in a complex transfer service. This has created many opportunities to improve not only clinical skills in transfer medicine but also the managerial, educational and leadership skills.

### Management and Leadership

As a new service in high demand, NCL-ACTS was and remains a unique opportunity to be involved with novel service development and delivery. Using all the tenets of multidisciplinary working, leadership has required collaboration and negotiation between multiple acute NHS Trusts, the local commissioning group, London Ambulance Service and NHS England/Improvement to maintain system efficiency. As an integral part of the regional surge planning, NCL-ACTS is vital to the sector's pandemic activity ensuring that all patients had equal access to critical care. NCL ACTS was also deployed nationally to provide mutual aid and assistance to other UK regions which helped balance critical care bed capacity.

Working with the service's consultant lead, we report both locally and regionally to NHS England. This key governance role revealed quality assurance

and management systems that trainees typically have little exposure too. Through presentations to both local and national stakeholders, not only has the service secured a significant funding settlement to maintain and grow, but it has also offered an opportunity to curate management and communication skills. Our senior trainees are currently working with NHS England and other local London transfer services on preparations to formally commission adult critical care transfer services across the capital. More usually these aspects of service development are thrust upon our consultant colleagues and through NCL-ACTS we have gained an invaluable insight as we approach the end of training and prepare for the transition to consultancy.

### **Education and training**

Most trainees will have experienced or heard one of the more senior trainees or consultants talk about their first transfer when they had to get into the back of an ambulance with an unstable patient just intubated in resus, on an immeasurable amount of life-saving infusions and machines either to get to the nearest specialist centre or down to CT. Often, this is followed by reassurance that transfer skills are learnt on the job, but contribute to the junior trainees' anxiety about undertaking critical transfers. Transfer medicine has always been a core competency for intensivists, anaesthetists, ICU nurses and pre-hospital staff with simulation recommended in the respective curricula but has frequently been neglected

in many trainees' education. Following resuscitation and stabilisation, a clinical transfer risks not only destabilising hardfought-for physiology but also staff and patient safety, making transfers a daunting task — one which is often delegated to the most junior on-call doctor.

With a rising demand for intraand inter-hospital transfers, there came a requirement to train & update nurses, ODPs, and other trainees in transfer medicine skills and knowledge. To meet that increasing demand for transfer competent practitioners, we developed a comprehensive and stepwise educational programme from novice through to more advanced knowledge.

Using innovative educational tools, including open-access eLearning and remote simulation, video teleconferencing allowed us to deliver training for many in a time where educational opportunities were limited by COVID restrictions. Mapped to the FFICM, RCOA, and critical care nursing curriculums we offer training in the core principles of safe transfer medicine. This is supplemented by supported on-the-job learning with our DOMs and through observer shifts which solidify the knowledge and enhance the skills taught through remote learning. Building on this foundation, a high-fidelity face-to-face simulation course, available from 2022 will progress learning to higher-level competency. Our educational strategy aims to reach anaesthetic trainees, ITU trainees, critical nurses and prehospital clinicians.

#### Conclusions

Our model of working allows for rapid adaptation to meet individual patient's clinical need. We have used multidisciplinary consensus to transfer some impeccably challenging patients: for example, a pregnant patient with COVID who required a prone interhospital transfer to ECMO centre, patients with intraaortic balloon pumps in situ; and patients with Sengstaken tube in situ needing interhospital blood transfusion.

When the critical care networks were faced with limited Level 2 capacity and limitation on ability to provide non-invasive ventilation in the second wave, the NCL-ACTS use of tiered support and multidisciplinary educational tools including in-situ simulation allowed the development of a standard operating procedure to safely transfer COVID patients with ongoing non-invasive ventilation.

Significant day-to-day management responsibilities along-side regular training commitments during the pandemic, made the development and leadership role challenging. However, we are immensely proud of maintaining a high quality, safe and effective regional transfer system, backed by a robust clinical governance structure. Building and running NCL-ACTS provides a multitude of opportunities to develop leadership competency, build strong educational foundations and cultivate clinical skills in the rapidly evolving remote environment of transfer medicine.



Dr Bhaskar Narayan Post-CCT Intensivist and Acute/Obstetric Physician

### Post-CCT Fellowship in Melbourne

I am in the final month of a one year fellowship at Monash Medical Centre, Melbourne. Although I had already benefited from several great training rotations in Manchester, London, and South East England, I was keen to experience ICU in a different country and healthcare system, particularly as my final year of training was dominated by the pandemic.

I also wanted to see and explore a new part of the world, and enjoy life after a tough couple of years. Melbourne has a reputation for being a great city to live in, and my wife was also offered a fellowship opportunity here, so we decided to go for it. Monash Medical Centre is a tertiary hospital with a large ICU. The case-mix includes the full range of medical specialties as well as cardiothoracics, neurosurgery, hepatobiliary, vascular and transplant surgery. It is also a regional referral centre for obstetric critical care, which is an area of particular interest for me.

The job was advertised on the Monash Health website and the application process was fairly straightforward, including the videolinked interview. However, there was a fair amount of paperwork in terms of registration with the medical licencing board (AHPRA) and visa application. I was well supported by the International Medical Graduates team but it did take several months for everything to come through.

In terms of the work, I felt welcomed and overall the transition was fairly smooth. Compared to the NHS, I found many more similarities than differences. One major difference is pay, which is very much better in Melbourne. The total working hours are slightly less than in the UK, but with a higher frequency of weekends and night shifts. Sadly there are some familiar problems too - staff shortages, high bed occupancy, and delays to admission and discharge. The approach to the clinical aspects of ICM, at least in the public sector where I have worked, is broadly similar to my experience in the UK. But the identity and status of ICM as a specialty is much stronger in Australia. The role includes weekly 'training hours'. Some of this is used for organised teaching, but I have also used this time to train in pointof-care lung ultrasound and to attend obstetric medicine clinics. Overall I have learned a great deal while I've been here — as well as the clinical experience, I have also gained confidence in leadership and running of the unit.

When we arrived in Melbourne in September 2021, the city was coming to the end of its last lockdown. We had to spend two weeks in hotel quarantine, but fortunately those restrictions have been lifted for the foreseeable future. We were surprised to discover how cold the weather was in winter and spring. However, since the easing of restrictions we have had a great time here. There is an amazing variety of food available and the city has a really relaxed atmosphere. Summer is hot, and the long Autumn is glorious, with warm sunny days extending well into May. Outside of work, I've played tennis, and I ran my first half marathon -I'd highly recommend doing this if you do come here as it's a lovely route along the river and lake, finishing with a lap of the MCG. I also attended the Boxing Day Test at the MCG and went to see the tennis at the Australian Open. We have travelled around Victoria state and also to other parts of Australia and to New Zealand, which was one of the real highlights.

So if you are looking for ideas for out of programme experience/training overseas, then Melbourne should definitely be on your shortlist. I did it post-CCT, but there is no reason why you couldn't explore the possibility of organising something more sub-specialty focused as part of Stage 2 or SSY. I'm looking forward to returning to Manchester but I'm also going to miss this place!

## Training Challenges from an International Doctor Perspective



Dr Taqua Dahab AIM/ICM Trainee, Mersey Lead Enhance induction Project for IMGGs in HEENW

Against the cultural expectations of a woman in my country, I decided to leave the warmth of family, friends and the bright sun at home to pursue a postgraduate medical career in this part of the world. And what a journey it has been so far! Full of blood, sweat and tears, ups and downs, and still ongoing... from the struggle of being an international doctor to leading a successful regional International Medical Graduates (IMGs) project in Health Education England North West (HEENW), where I am currently being trained.

I obtained my primary medical qualification from my home country of Sudan, and then I moved to the Republic of Ireland to do an equivalence for Core Medical Training. After that, I came to the UK as an ST3 trainee in Acute Medicine—which was my first encounter with the NHS system. After three years in Acute Medicine, I decided to undertake a new adventure and join ICM as a dual speciality.

The mandatory requirement for IMGs to join the ICM training programme from a medical background requires the MRCPUK and completed Alternative Certificate for Internal Medical Training competencies; it gets updated yearly and is available on the JRCPTB document library website. This alternative certificate has to be signed off by a consultant working in the NHS who has been at least a clinical supervisor in the past five years. This requirement could be a challenge if you worked internationally with consultants who have not previously worked in the NHS. The recent GMC update in January 2021 now alters

the CSER-CP pathway to allow all IMGs to start training at ST3 ICM from an alternative route and offers CCT instead of CESR-CP. This change will entice more international doctors to apply for ST3+ training. A CESR-CP was not recognised outside the UK, and this caused struggles for IMGs in the past.

### Challenges

I started my first job in the NHS as an ST3 registrar, and this was, by far, one of the most significant challenges in my life. International trainees who secure their training numbers with no prior experience in the NHS are likely to be hard workers and have exceptional portfolios to compete nationally with local trainees, and they then get the job. However, as soon as they land in the placement, problems start to arise. Adapting to life in a new country, the training programme itself, and performing at the same level as colleagues who have been in the programme for at least four years is not easy.

Cultural differences arise, and the international trainee needs time to understand the interpersonal skills that suit the new cultural norms. Language and accent are additional hurdles. For someone like me, who speaks English as a third language, understanding the Scouse accent of the Merseyside people, for example, was not easy. Often, communication could be misinterpreted and cause some uncomfortable situations! On top of that, being away from your loved ones, who are often the primary source of support, in long, cold, dark nights of wiping tears of isolation and loneliness, could significantly affect mental health

and well-being and result in stress, anxiety and burnout.

The international trainee also faces complex immigration paperwork and visa issues, which can also be stressful. I have twice been in a situation in which I was not given the green light to start a new placement during training due to delays in the visa process. These issues were usually rectified just before the changeover, but the situation was frustrating! Imagine not being able to start a post with the rest of your colleagues and having that consistent threat to your career progression. It is a hidden stress for most international trainees that does not get revealed to others.

Training progression for IMGs is an interesting area in medical education. I have deliberately included this issue here, after explaining factors that could affect the international trainee outside of work and significantly impact performance in the workplace. Differential Attainment (DA) among IMGs is a well-known phenomenon that is documented in the literature and is well researched. It means that people from different backgrounds, like IMGs, perform less well in ARCP and exams and have lower job satisfaction. In addition to the trainee-related factors, trainers/ training factors, including failure to understand the "community of practice" the trainee is exposed to, also arise. This raises the question of whether any subconscious biases affect the assessment of international doctors when compared to others just because their background reveals that they have not trained here or are not as fluent in communications as others? The evidence in medical education research suggests that

this could happen.<sup>1</sup> Therefore, measures are recommended to overcome these challenges, considering the factors discussed earlier. These must be anticipated and watched for by supervisors to address them early.<sup>2</sup>

### **Reflection on my experience**

As I reflect on my experience as an IMG, I feel that many of the struggles I experienced could be reduced for future international colleagues in training by understanding their complex needs and providing them with support at the beginning of their training to help them settle into the new life they have opted to take on. This, in my opinion, is a shared responsibility between trainees and their trainers.

I am currently leading the enhanced Induction for International Medical Graduates Project in HEENW as part of the Equality, Diversity and Inclusion Network. This project first came to mind when I started informally mentoring two IMGs who had started in the trust and who, like me, had started without any specific induction addressing them as a different cohort of doctors. I wondered why we do not have a special induction package that targets the gaps that I know, from my own experience, lie ahead for these doctors. I gave it the name 'From Induction to the First ARCP'. Along with five other IMG trainees in other regions, supervised by two supportive Associate Deans in HEE (Dr Clare Inkster and Dr Aruna Hodgson), we started to deliver this induction package over the past 18 months. It has a step-by-step guide explaining what the trainees can do with their lives upon landing at the airport, how to start their

jobs, and tips for communicating with their supervisors. We even include a dictionary for the Scouse terminology often encountered in a hospital! This allows the trainees to understand their portfolios, as well as learn how to be proactive, sell themselves better, and understand the ARCP process. There is also a sub-project of the 'buddy system' in different specialities, in which a junior IMG gets paired with a senior IMG in the same speciality through a threephase mentorship programme. Our hope is that these measures can reduce Differential Attainment in international trainees and improve their experience

Trainers supervising international trainees could put in the time and effort to understand the IMGs' problems and foster their abilities while building a trusted educational relationship by giving confidence, reassurance and constructive feedback. Having a trainer understand differential attainment may be the key to an international trainee settling nicely into the system, performing well in training, and being an investment for the NHS future workforce. I am lucky to have this quality of trainers in Intensive Care Medicine in my region, and this has eased some of my stress.

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# Painting an ICU

### "[Monet was] only an eye – yet what an eye."

### – Paul Cézanne

Since the COVID-19 pandemic, I have found ICU family communications incredibly difficult.<sup>1</sup> This was not least due to the uncertainty and unpredictability of the disease, especially in the initial stages of the pandemic. Equally difficult were the telephone conversations we were having to anxious, stressed and concerned relatives about their critically ill loved one. In April 2020, BBC Radio 4 broadcasted a short reflective piece I wrote about such professional and personal difficulties.<sup>2</sup> Entitled 'Telephone Lament for Coronavirus', it was framed within Stevie Wonder's song 'I Just Called to Say I Love You'. It demonstrated the

difficult conversations we were having, highlighted the lack of vocabulary we had to convey critical illness over the phone, as well as expose some of our own personal struggles early in the pandemic. As I reflected further about my own progression through Intensive Care Medicine training, and the communications struggles we faced as a result of COVID-19, I found myself drawing parallels to the development of impressionism through the work of Claude Monet.

### Light and movement

Much has been written about Monet's ophthalmic pathology.<sup>3-6</sup> However, attributing his stylistic development

merely to cataracts seems an overly reductionist view. In fact, in 1874, at least fifteen years prior to his Japanese Bridge and Water Lilies series (which forms the backdrop to his diagnosis of cataracts), his famous paintina Impression, Sunrise drew scathing criticism from art critic Louis Leroy, who described it as a partially finished wallpaper,<sup>7</sup> and, in essence, unwittingly coined the impressionist movement. Contrary to Leroy's criticisms, Monet purposefully diverged from the then widely accepted practice to idealise a scene when painting. He considered light and its effect on colours, and movement and its effect on visual perception. He began painting outdoor scenes. He would paint with wet paint over wet paint, dramatically widening the range of contrasts, textures and depths he could achieve. Central to the impressionist philosophy was the artist's perception of the scene, complete with peripheral influences of subject matter, from environmental conditions and lighting to his internal emotions and expressions of such.<sup>8,9</sup>

In medical school, I was obsessed with details. From Aspergers and Alport syndrome to Z-lines and ZAP70, the study of medicine seemed clear cut. If only one knew all the labels, pathways and interactions, medicine could be mastered. Take a multisystems disease like sickle-cell anaemia for example. The many signs and symptoms could be reduced to the effect of anaemia and the shape of the defective erythrocyte, which in turn could be confirmed via blood film and usually a result of a single amino acid substitution.<sup>10</sup> It was logical, linear and lucid. Yet, at times this

seemingly universal philosophy of reductionism within science fails to consider the entirety of human experience. The complexity of human pathology, irrationality of human behaviour and the unpredictability of some critical illness journeys defy the rigid attempts of reductionism to classify and categorise. Medicine, if practiced with a purely reductionist approach, would indeed be suppressive, going against the Hippocratic oath to "do no harm or injustice [to patients]".

### A holistic view

Intensive Care Medicine training was pivotal in helping me develop a more holistic view of life, death and well-being. As I progressed through specialty training, I began to learn more about the inadequacies of the reductionist thought process. An overarching impression of clinical trajectory was far more important than the exact quantification of abnormal blood results or investigations. I learnt from experienced clinicians who had developed such acumen and were able to collate and process information to formulate clinical impressions.

Slowly, my own perception changed too. I started looking at patients and their quality of life, instead of merely whether they would live or die. I explored their priorities, their social networks and their spiritual needs. Taking these into account allowed me to build a fuller, richer and more holistic clinical picture, one that would enable me to make better and more humane decisions. This was the art of medicine. The clinical examinations were my brushes, investigations were my paints, and the history became my

scene, environment and lighting. I became an impressionist.

Not just me. Monet's progression from exquisite detail to impressionism seemed to also play out in family communications during COVID-19. During the first wave, I took care of a patient called Gurjit. He was slowly deteriorating and I remember speaking to his son Bilal, "Your dad is very unwell. He is sedated and on a ventilator. While he is stable at the moment, his condition is precarious and he is requiring high amounts of oxygen and some powerful drugs to maintain the condition of his heart and lungs." I tried to explain his father's condition over the telephone, and struggled with it.

While myself, and several colleagues ended up using the term "stable", we soon found ourselves needing to clarify what that meant. It occurred with several other patients too. In fact, I soon found myself hating the word, and ended up writing another essay criticising the use of the term "critical but stable" within ICU communications, particularly when there is a lack of visual or environmental input with which families can interpret our vocabulary.

What I did not expect, was how fixated Bilal seemed on the observations and blood results. It turned out that he was a pharmacist working in another country. Each day, he would ask many questions: "What are his saturations now? How is his CRP? What about white cells? How is his renal function?"

He clearly had knowledge, but somehow I felt he failed to grasp the actual predicament of his father. He failed to appreciate the high amounts of oxygen maintaining the saturations, or the vasopressors bolstering his blood pressure. He could not feel the cool, diaphoretic skin of his critically ill father. He did not see the multiple monitors, machines and devices which normally instils fear and discomfort for many families visiting the ICU.

### Important to families

But of course, this was entirely predictable. I knew how important it is for families to witness the critical care of their relative. It was why I preferred to speak to families first by the bedside. It provided multi-sensory input from the environment which aids understanding of the severity of illness. Perhaps Bread put it far better than I could ever write when they sang "if a picture paints a thousand words...". But this time, over the telephone, the overwhelming sensory experience of a visit to ICU seemed diminished, dampened and dulled

"I think you should come in to see your father. He is deteriorating despite our best efforts and on the maximum support we can offer."

We thought we had been clear several times that we were pessimistic about Gurjit's prognosis, but somehow it took iterations and repetitions for Bilal to finally realise how sick his father was, and that he was likely to die. It was as if he just could not make out Monet's Japanese bridge, or that like Leroy, he failed to appreciate the entire painting of Impression Sunrise, just because he was too focused on the detail. Finally, the light dawned on him, then the questions began to change. Instead of the minute detail, Bilal was able to form an impression of the situation.

Through the course of the conversation, Bilal began to abandon his questions about minute details of blood results and observations. In Monet-like fashion, he started to develop an overall impression of his dying father, building up his mental image of illness, sickness and death. In similar fashion, L quided Bilal to integrate and assimilate the clinical data we had collected on Gurjit over the last few days, encouraging him to form an overall impression of his deteriorating father. Likewise, the clinical team had to abandon our initial visiting restrictions. In the face of certain death, our adherence to black and white policies were slowly areyed, coloured and blurred.

### Painting over the phone

"I will fly in tomorrow to see him, but I'm not sure what to expect. I've never been to an ICU before." Bilal asked.

So I painted an ICU over the phone; an overall impression à la Monet. Broad strokes of the environment, from the machines to the monitors. I filled in the muted colours; lines which were inserted into Bilal's father. Then the lights and shadows. Lights of the various beeps and alarms which he might see and hear. Shadows of the withdrawal decision and the certain descent into death. I told Bilal that a staff member would be with him, guiding him, much like how I had prepared him for visiting. The next day, as Bilal came in and stood in front of his

dying father, his mind painted the last scene of Gurjit. Gone was the focus on vital signs. No longer were the intricacies of blood results important. The fatherly constant in Billal's life was now merely a fleeting frame of a bridge. Just like Monet's impressions of the Japanese Bridge faded with his advancing age and deteriorating health, Billal's last impression of his father was now filled with a more irregular palette, darker hues, blurred lines and patchy reflections. Comfortable, assuaged and undistressed. I was confident that Gurjit would die a dianified death. This, at the very least I hoped, would have formed an equally beautiful final impression.

Today, many ICUs still maintain tight visiting policies. While Bilal eventually developed his own impressionism, and got to see his father at end-of-life, I can think of many other families who have been traumatised by the inability to visit their critically ill relatives. The absence of family not only hinders recovery efforts of patients<sup>11 12</sup>, but may also increase the risk of mental health disorders beyond the critical illness journey<sup>13</sup>. While many units have adopted video-communication strategies to mitigate the restrictions, relatives continue to yearn to share physical fellowship with their critically ill loved one. Isn't it time we cross our own bridge spanning visiting restrictions and humanity?

### Anonymity

"Like a bridge over troubled water, I will lay me down..."

– Simon and Garfunkel

The names and details of this case have been changed to preserve



anonymity. Any resemblance is purely coincidental. This essay has been edited from one which has received an honourable mention for the Hektoen International Grand Prix Essay competition 2021 (https://hekint.org/2021/08/19/ painting-an-icu/). Another essay Critical but Stable - critical care communication in the COVID19 pandemic complements this piece well and has won 3rd prize for the Doctors for the NHS essay competition 2021. Read it in ICM journal here: https://rdcu.be/ cJ8pd.

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# CASE REPORT: Multisystem inflammatory syndrome in an adult following COVID-19 vaccination (MIS-AV)



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The last two years have been dominated by COVID-19, its various presentations, complications and their management. The first COVID-19 vaccine, produced by Pfizer-BioNTech was granted regulatory approval on 2 December 2020 by the UK medicines regulator MHRA. It was evaluated for emergency use authorization (EUA) status by the US Food and Drug Administration, and in several other countries. Following millions of doses, during the early months of 2021, reports of side effects of the vaccines began to emerge.

In this case report we discuss the case of a 22 year-old female patient who presented with fever and confusion, with later progression to multiple organ failure; following administration of Pfizer-BioNtech vaccine. She was successfully treated with IVIg and high dose IV corticosteroids. This case report is unique as lymph node biopsy was carried out — this showed marked suppurative inflammation with vasculitic changes, thus supporting the diagnosis.

### Background

It is recognised that SARS-CoV-2 causes a profound immune response in certain individuals, and it is this response that is responsible for the ensuing respiratory pneumonitis found in this cohort. Treatment options currently focus on modulation of this immune response using steroids, interleukin-6 inhibitors, and monoclonal antibodies. There are multiple case reports on multisystem inflammatory syndrome(MIS) in adults (MIS-A), following, and related to, COVID-19 infection. This is distinct from the usual clinical picture of covid pneumonitis and has more in keeping with vasculitic processes such as Kawasaki disease. The specific case definition for MIS-A is outlined in Appendix 1. The condition mirrors that found in the paediatric population, multisystem inflammatory syndrome in children (MIS-C). Currently there has been a single reported case of multisystem inflammatory syndrome after vaccination (MIS-V) with Pfizer BioNTECH vaccine.<sup>3</sup> The presented case report features a singular presentation of MIS after the second dose of Pfizer vaccine; and its successful management with IV Immunoglobulin and IV corticosteroid therapy.

# The patient significantly improved and was successfully extubated on day seven in the intensive care unit.

### **Case presentation**

A 22-year-old female patient presented to hospital with headache, neck pain, vomiting, diarrhoea, abdominal pain, photophobia and malaise two days after the second dose of Pfizer vaccine. She had no history of previous COVID-19 infection. On presentation to ED she was tachycardic and pyrexial. Blood pressure was normal. She was suspected to have meningitis and treated with ceftriaxone and acyclovir. CSF sampling was unremarkable. She was initially managed on the ward but deteriorated on day three with persistent fever over 40°c, tachycardia, severe hypoxia, lactataemia and hypotension which was unresponsive to IV fluids. She was admitted to ITU and initially managed with high-flow nasal oxygen and vasopressors; she quickly fatiqued and was subsequently intubated and ventilated.

Rapid, and progressive multisystem failure occurred over the next 18 hours, manifesting as hypotension (cardiovascular), hypoxia (respiratory), azotemia with oliguria (renal), nonabsorption of feeds and diarrhoea (GI). Focused intensive care echocardiogram showed well filled but poorly contracting right and left ventricles, so she was commenced on dobutamine. Renal dysfunction was initially managed conservatively but in view of severe metabolic acidosis, oliguria, azotemia and progressive severe hyperpyrexia, she was commenced on hemofiltration.

CT chest/ abdomen was performed as a diagnostic aid - working diagnosis at this point was severe sepsis and we were seeking a source. This showed multiple enlarged mesenteric lymph nodes but no other abnormalities. By this point the patient was moribund and, after discussion with the surgical team, underwent a diagnostic laparoscopy. This showed multiple mesenteric lymph node enlargement, minimal ascites, and small left ovarian cyst. Lymph node biopsy and ascitic sampling were performed to aid diagnosis.

No source of sepsis could be identified, and all microbiological sampling was negative. Broad spectrum antibiotics (ciprofloxacin, vancomycin and meropenem) had been administered for more than 24 hours with no clinical improvement. Following multidisciplinary discussion, it was decided the presentation correlated with a diagnosis of MIS-A. and treatment with 2g/ kg of IV Immunoglobulin and Ig of methylprednisolone daily for five days commenced. This led to rapid improvement in the clinical condition with resolution of hyperpyrexia, cardiovascular instability and decreasing oxygen requirements within 36 hours of commencement of this treatment. The patient significantly improved and was successfully extubated on day seven in the intensive care unit. Repeat echo showed return of normal ventricular function. She made a full recovery and was discharged home on day 13 post-admission.

### Investigations

- On admission the positive findings on the blood tests were a raised white cell count-15.1\*10`9/L, and CRP 349mg/L.
- **CSF analysis** on admission: appearance clear, no cells detected, gram stain and culture- no organisms seen.
- Admission **chest X-Ray** did not show any acute finding.
- **CT head** on admission did not reveal any acute pathology while **CT abdomen and pelvis** day three post-admission showed significant mesenteric lymphadenopathy.
- **Microbiology:** All of the body fluid and blood cultures did not yield any positive results.
- Virology: CMV and EBV IgG and IgM were both positive but

thought to be non-significant.

- Vasculitis and autoimmune screen was negative.
- Transthoracic echocardiogram did not show any evidence of vegetation with biventricular dysfunction that resolved as she improved.
- The **lymph node biopsy** was suggestive of marked suppurative inflammation, with background acute vasculitic changes thought to be secondary to the initial inflammatory insult. It was felt this was compatible with a diagnosis of MIS-A.

Three negative SARS-CoV-2 PCR tests ruled out the possibility of active:

- **COVID-19** as the culprit for current presentation.
- COVID-19 antibodies were positive – possibly from the vaccination or representing previous infection.
- Macrophage activation syndrome was considered in view of mildly elevated ferritin but there was no evidence of hypofibrinogenemia or cytopenias in more than two lineages).<sup>89</sup>
- Blood investigations (Appendix 2)

### Discussion

MIS (multisystem inflammatory syndrome) was first described in the paediatric population (Paediatric inflammatory multisystem syndrome: PIMS) in April 2020 and linked to COVID-19.<sup>1</sup>

Symptoms of PIMS can overlap with Kawasaki disease and Toxic Shock Syndrome but Kawasaki disease tends to affect children under five whereas PIMS seems to affect older children and teenagers.10

Following this there have been multiple reports of multisystem inflammatory syndrome in adults (MIS-A) related to COVID-19 infection.

Systematic review by the Brighton Collaboration has identified 27 observational studies and case reports of Kawasaki disease following a range of vaccinations, including diphtheria-tetanuspertussis (DTP)-containing vaccines, Haemophilus influenzae type b (Hib) vaccine and many more. However, the review did not find evidence of an increased risk of Kawasaki Disease following any of the above immunizations.<sup>7</sup>

MIS-C/A are distinct from both Kawasaki Disease and Toxic Shock Syndrome - the pathophysiology is poorly understood, but they appear to be a post-infectious manifestation of COVID-19.45.6

More case reports are needed to look into the association of MIS with vaccination and the timing of such presentation. An interesting aspect of our case is that the patient presented following the second dose of the vaccine rather than after the first dose. This may represent priming of the immune system, leading to severe inflammatory response on second exposure.

The previous case report by Karthikeyan P Iyengar-et al<sup>3</sup> and our case report suggest that treatment of MIS-V includes IV Ig and corticosteroids. We will need further research into this as the paediatric population is now being inoculated with the vaccine. Clinicians should be aware of the presentation so that it can be diagnosed and managed appropriately.

### Appendix 1: MIS Case definition by CDC for Adults<sup>2</sup>

A patient aged ≥21 years hospitalised for ≥24 hours, or with an illness resulting in death, who meets the following clinical and laboratory criteria:

The patient should not have a more likely alternative diagnosis for the illness (e.g., bacterial sepsis, exacerbation of a chronic medical condition).

### **Clinical Criteria**

Subjective fever or documented fever (≥38.0 C) for ≥24 hours prior to hospitalization or within the first **three** days of hospitalisation and at least **three** of the following clinical criteria occurring prior to hospitalisation or within the first **three** days of hospitalisation. At least **one** must be a primary clinical criterion.

#### Primary clinical criteria

- Severe cardiac illness Includes myocarditis, pericarditis, coronary artery dilatation/ aneurysm, or new-onset right or left ventricular dysfunction (LVEF<50%), 2nd/3rd degree A-V block, or ventricular tachycardia. (Note: cardiac arrest alone does not meet this criterion)
- Rash AND non-purulent conjunctivitis
- Secondary clinical criteria
- New-onset neurologic signs and symptoms Includes encephalopathy in a patient without prior cognitive impairment, seizures, meningeal signs, or peripheral neuropathy (including Guillain-Barré syndrome)

Investigation	DI	D4	D6	D8	Discharge
Hb g/L	135	102	74	65	106
WCC 10'9	15.1	14.9	13.5	11.4	16.8
CRP mg/L	349	391	101	16	17.1
Creat µmol/L	77	121	356	192	85
Procalcitonin ng/ml		>100		0.1	

### Appendix 2: Blood investigation review

- Shock or hypotension not attributable to medical therapy (e.g., sedation, renal replacement therapy)
- Abdominal pain, vomiting, or diarrhea
- Thrombocytopenia (platelet count <150,000/ microliter)

### Laboratory evidence

The presence of laboratory evidence of inflammation AND SARS-CoV-2 infection.

- Elevated levels of at least TWO of the following: C-reactive protein, ferritin, IL-6, erythrocyte sedimentation rate, procalcitonin
- 2. A positive SARS-CoV-2 test for current or recent infection by

RT-PCR, serology, or antigen detection.

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### More case reports are needed to look into the association of MIS with vaccination and the timing of such presentation.

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## ACCU Hepatology Crossword



#### Across

- **3.** Type of Streptococcus most likely to cause a pyogenic liver abscess
- 5. In a paracetamol overdose, glutathione depletion leads to a build-up of which toxic metabolite?
- 6. Anaesthetic agent known to cause hepatitis with repeated dosing
- **10.** IV Colloid administered to reduce the risk of hepatorenal syndrome following paracentesis
- 12. Treatment indicated in alcoholic or autoimmune hepatitis
- Diagnosis is made by the presence of > 250 neutrophils per mm3 of fluid
- 15. Scoring system used to gauge mortality in acute on chronic liver failure, with a superior predictive value to other scoring systems
- **16.** Vitamin supplementation that should be given to all alcoholic liver disease patients
- **17.** IR treatment for portal hypertension which can worsen hepatic encephalopathy
- **18.** Syndrome of paediatric liver failure and neurological disease, associated with aspirin use
- **19.** Impairment of this hepatic process can lead to hypoglycaemia

#### Down

- Somatostatin analogue used in variceal bleeds, which reduces portal venous pressure and gastric acid secretion
- 2. Drug used in hepatic encephalopathy dosed at 550mg BD
- **4.** Disease of liver failure associated with Kayser-Fleischer rings
- 6. Syndrome characterised by release hepatic circulation vasodilators, and excessive vasoconstriction secondary to the RAAS
- 7. Trial which demonstrated that TXA was not found to be beneficial in GI bleeding
- **8.** Syndrome causing acute liver failure secondary to hepatic vein thrombosis
- 9. Liver dysfunction associated with Pre-eclampsia
- Hepatic encephalopathy treatment, promoting growth of non-ammonia producing bacteria and lowering colonic pH
- 14. Scoring system A to C used to gauge prognosis in chronic liver failure patients



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