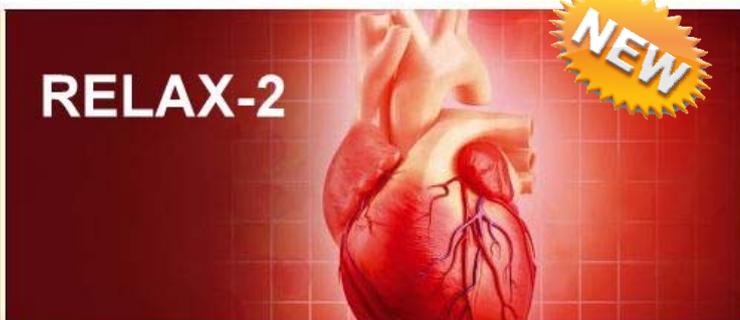




EMeRGE aims to coordinate, facilitate and promote quality research in Emergency Medicine



**'This study will be one of the most important ever done in patients with AHF and the results are likely to influence practice around the world for years to come.'** (Novartis Pharmaceuticals)

Relax -2 is a double blind randomized control trial in patients with AHF to test the effect of serelaxin on mortality after 6 months. Serelaxin is a copy of a hormone

that is produced in pregnancy that has haemodynamic effects which improve and protect heart and kidney function. In previous studies Serelaxin

has shown to improve patient reported dyspnoea and reduce mortality. Relax-2 is a collaborative trial between EMeRGE, acute medicine and cardiology; patients are identified and recruited in the ED or CAA, admitted to CCU and then followed up by the cardiology research team.

The trial is worldwide and aims to recruit 6375 patients by the end of 2015.

Here in the RIE, we started the trial in the beginning of June but are yet to recruit a patient. We are expecting to recruit about one patient per month.

**Eligible patients are those with shortness of breath with pulmonary oedema secondary to heart failure that have, or are likely to be, prescribed IV diuretics.**

**If you come across a patient who fits the criteria please contact the EMeRGE nurses on bleep 07659524601 — there will be rewards!**

#### The RELAX-2 Team:

**INVESTIGATORS:** Alasdair Gray (ED), Martin Denvir (Cardiology) and James Dear (Acute Med). **RESEARCH FELLOWS:** Sarah Richardson (ED), Tania Pawade (Cardiology). **RESEARCH NURSES:** Polly Black and her EMeRGE colleagues.

## Paramedic Ultrasound in Cardiac Arrest—PUCA Study Day

The next phase of the PUCA (Paramedic Ultrasound in Cardiac Arrest) study, a one-year collaborative project led by Matt Reed and funded by the Resuscitation Council (UK), took place last month on the 20<sup>th</sup> June.

Eleven 3RU (Resuscitation Rapid Response Unit) paramedics attended one day of formal lectures, practical teaching and moulage practice in the Clinical Skills Lab of the Chancellors Building delivered by many of the ED registrars and consultants who kindly gave up their time to teach. The aim of the day was for the paramedics to learn focussed Echo in Life Support (ELS) and how to incorporate it into the pre-hospital management of cardiac arrest.

The day was a huge success. By the end of it, all paramedics were able to obtain both parasternal and subxiphoid views. Paramedics were also able to integrate ELS into simulated cardiac arrest scenarios. When asked to scan during the ten-second pulse check window, 88% of attempts were successful for both views, with a mean image quality of 4.0 out of 5 in parasternal and 3.8 out of 5 in subxiphoid view. There was also a significant improve-

ment in paramedics' theoretical knowledge with a mean pre-course score of 54% and a mean post-course score of 89%. There was also a significant improvement in confidence in all the aspects of ELS that were covered. The feedback for the day was also outstanding with all aspects of the course scoring an average rating of at least 4.7 out of 5.



The skills that the paramedics attained during the day will now be put to test in the pre-hospital environment over the next 12 months in order to assess whether paramedics can learn and successfully incorporate ELS into cardiac arrest care, to assess whether ELS can improve patient care,

and finally to assess the state of the heart during the pre-hospital phase of cardiac arrest care. Already since the course, two patients have undergone pre-hospital ELS minutes after their cardiac arrest, both successfully attaining ROSC.

(Text: Matt Reed; Photos: Ola Gruszczynska)



## We completed another study!

The PREFER study (The Prevention of Thromboembolic Events - European Registry in Venous Thromboembolism) was the EMeRGE teams' first venture into industry funded research. The

study aimed to recruit adult patients with an established acute first-time or recurrent PE or DVT (VTE). The study followed up patients for one year with the aim of creating a registry, which will help future management of this patient group.

Edinburgh was given a target of recruiting 20 patients, which initially seemed a fairly straightforward task. However with a patient not becoming eligible until their diagnosis had been made, finding the most appropriate time to approach eligible patients and then to help them through the tome that was the recruitment paperwork proved more difficult than expected. Once diagnosis had been made, many were discharged, so the PAA VTE clinic eventually

### PREFER in VTE REGISTRY

proved the most reliable method of approaching potential study participants.

The study has now closed to recruitment and is in the analysis stage and we await some results over the next six to twelve months. Our final recruitment number of 27 patients was thanks to all those in the Emergency Department who helped flag up potential patients with DVT and PE, the staff in the medical outpatient VTE clinic, EMeRGE research nurses Julia Grahamslaw and Rachel O'Brien, and the real star of the study, to whom a special thanks must be reserved, EMeRGE research nurse Denise Lenihan.

Denise clocked up the kilometres on her Thursday research days, visiting the previous day's ED patients in PAA, outpatients and on the medical and respiratory wards. Whilst PREFER

psychological wellbeing, it certainly helped her attain the British Heart Foundation's recommended 10,000 steps a day by a long way proving that a job in the EMeRGE group is not only a satisfying way to spend your time, but also a very healthy one!

Text: Matt Reed

Another exciting news! New EMeRGE Research Nurse Manager, **Miranda Odam** has started in her new role end of July 2014 — we will tell you a little bit more about her in the next issue of our newsletter.

\* \* \*

The team would like to thank Judy Coyle for acting up in the role after Moyra Masson retired. Judy did a brilliant job!

### Adam Lloyd - Nursing PhD in Emergency Department

Over the past several months I have been fortunate to work alongside the staff in ED in my capacity as a Trainee Research Nurse with EMeRGE. I have had a longstanding interest in this clinical area and I was grateful to have an attachment here as part of my Masters degree (along with my good friend and colleague Polly who is now a research nurse with EMeRGE). During this time I have experienced the unique challenges that emergency research faces as well as the variety of research strands that exist within the service.

During this clinical attachment one such strand that I have focused on is the work being done by Dr Gareth Clegg, specifically how team performance can affect the outcome of resuscitative care. The skills needed for successful performance has been thoroughly studied in specialities such as surgery and critical care (anaesthetists). However there is a real lack of research with regards to the nursing skills and attributes that are needed for optimal patient outcomes. Recognising this fertile



area of research I recently applied for the Gardner Scholarship at the University of Edinburgh. This scholarship is designed to offer nurses the opportunity to undertake a full-time PhD over 3 years. With the support of Gareth, the Resuscitation Research Group and the EMeRGE team I was successful with this application. Although I have only spent a relatively short amount of time in ED it is clear from speaking to the nurses that they have a wealth of knowledge and experience that I hope I can learn from. I look forward to engaging with the staff about their ideas and hopefully we can work together towards a stream of nursing research.

I would like to say thank you to Dr Alasdair Gray, Dr Matt Reed and most importantly to my supervisor Dr Gareth Clegg for their time and guidance. Finally I would like to thank the RRG, the nursing staff in ED and my mentors in EMeRGE (Judy, Rachel, Julia, Alison, Denise and Ola) for all their help. I look forward to working with all of you over the next 3 years.

Text: Adam Lloyd  
Photo: Ola Gruszczynska



LAVAS study finished recruiting end of June 2014. From October 2013 we recruited **330** patients, so

**WELL DONE EVERYONE!**

Now the study is in follow up — lots of data to be analysed in order to determine the level of agreement between peripheral venous and arterial lactate in sepsis. We will keep you informed when the outcome is known, which as we anticipate, will happen in January 2015.

### The EMeRGE Team

#### Consultants:

Dr Alasdair Gray  
Dr Gareth Clegg  
Dr Matt Reed  
Dr Stephen Lynch  
Dr Jen Browning

#### Trainees:

Drs R Lyon, D Datta, S Richardson

#### Research Nurse Manager:

Miranda Odam

#### Research Nurses:

Judy Coyle, Alison Glover (SNBTS), Julia Grahamslaw, Rachel O'Brien, Polly Black, Amy Dunn, Jen Simpson, Kirsty Simpson

#### Research Administrator:

Ola Gruszczynska (newsletter, photos, www)

