



TheAlfred



Emergency and Trauma

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The Emergency and Trauma Centre has an active research program that covers a broad spectrum of activity and involves collaborations with most inpatient units, the National Trauma Research Institute (NTRI) and the Monash University Department of Epidemiology and Preventive Medicine (DEPM).

Five emergency specialists and one nurse specialist are undertaking doctoral studies and a large number of nurses and doctors are undertaking postgraduate research training. The Emergency and Trauma Centre also takes a leading role nationally in hosting a research training course for emergency trainees. Publications have consistently increased over the last decade.

Major ongoing collaborative research projects with NHMRC research funding include:

- **Australasian Resuscitation in Sepsis Evaluation (ARISE)** – an NHMRC funded randomised controlled trial across more than 40 hospitals involving the emergency and intensive care areas, in collaboration with the Australian and New Zealand Intensive Care Society (ANZICS) research group. The study examines the role of early goal directed therapy in severe sepsis and will take a further two years to complete.
- **POLAR** – an NHMRC funded randomised controlled trial across six hospitals in collaboration with the ANZICS research group to determine the role of hypothermia in protecting patients with traumatic brain injury from further secondary brain injury has commenced enrolment.

Patient receives acupuncture in the Emergency and Trauma Centre as part of the MEDACT Study.



- **MEDACT** – an NHMRC funded randomised controlled trial in collaboration with RMIT University across three hospitals. The study, which aims to determine the role of acupuncture in acute pain syndromes presenting to the Emergency Department, has commenced enrolment and is led by Dr De Villiers Smit.
- **HOLTT** – an NHMRC and Traffic Accident Commission funded study in collaboration with the Hyperbaric Unit examines the role of hyperbaric oxygen in lower limb trauma and continues to enrol patients.
- **RINSE** – a prehospital randomised controlled trial in collaboration with Ambulance Victoria assessing the outcomes of early cooling post cardiac arrest. This study has just commenced and will continue the extensive Melbourne based research that has already changed management in this area.
- **Patient Safety** – in conjunction with the DEPM, there has been an emphasis on improving the methodology for measuring and improving patient safety. This has involved research to improve outcomes in trauma, burns and cardiac arrest. Smaller projects have included investigation of human factors in areas such as wrong blood in tube and patient handover.

The Alfred Emergency and Trauma Centre is a leader in international emergency medicine and has received funding to undertake improvements to emergency and trauma care in Sri Lanka, India, China, Singapore, Hong Kong, Malaysia and other nations. A number of collaborative research projects are being undertaken to evaluate these programs.

Collaboration with Ambulance Victoria has been particularly important for the Emergency and Trauma Centre. As well as being involved in a number of large randomised controlled trials, collaborative research with Ambulance Victoria using the Victorian Ambulance Cardiac Arrest Registry (VACAR) has been integral to investigating the epidemiology, management and outcomes of out of hospital cardiac arrest. Dr Conor Deasy, an emergency specialist from Ireland, has undertaken a PhD studying improvements to out of hospital cardiac arrest management in Victoria. His work has involved evaluating outcomes in patients at the extremes of age – paediatrics and the elderly. Conor has also evaluated the impact of the changes to guidelines for resuscitating cardiac arrest victims.

Postgraduate Students

3 PhD Students
50 Masters Students

Publications

33 Journal Articles
1 Book
1 Book Chapter

Diagnostic and Interventional Radiology continued from page 36

MRI

- A Phase 2, randomised, double-blind, placebo-controlled, study to evaluate the safety and efficacy of daunetide for the treatment of progressive supranuclear palsy MRI component
- Aspirin for the prevention of cognitive decline in the elderly: a neuro-vascular imaging study (ENVIS-ion) from ASPREE

- Evaluation of cerebral AVM before and after radiosurgery utilising brain STAT cerebral perfusion with arterial input function
- Use of posterolateral corner injuries of the knee

Other

- The impact of norfloxacin on portal pressure and endotoxaemia and the role of vasoactive mediators in clinically significant portal hypertension
- Osseointegrated prosthesis for the rehabilitation of amputees