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Emergency Medicine in the Military – A New Untapped Speciality[1]

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Abstract
Emergency Medicine is a new specialty in Australia. This specialty presents the Australian military with a specialist with training and skills ideal for a variety of roles, in both in peacetime and at war. This article discusses some of the benefits.

Introduction
The Australasian College of Emergency Medicine (ACEM) was established in 1986 and the specialty of emergency medicine was recognized in 1993. Currently, there are 300 Fellows of the College. With 700 trainees, emergency medicine is the fastest growing specialty in Australia. In the military, however, it remains an untapped resource, although times may be changing, albeit slowly. In the United States (US), emergency physicians have been involved with the US military for at least 15 years, with many emergency physician's serving routinely and operationally in the military. The aim of this article is to discuss the potential role of the emergency physician in the Australian military, particularly the Army, the service with which I have had the greatest experience.

Discussion
Emergency medicine is the field of medical practice based to the knowledge and skills required for the diagnosis and management of the acute and urgent aspects of illness and injury affecting patients of all age groups. This covers a full spectrum of episodic and undifferentiated physical and behavioral disorders. It further encompasses an understanding of the development of prehospital and in hospital emergency medical services, and the skills necessary for this development (as outlined by International Federation of Emergency Medicine in 1991). The emergency physician's work daily in an environment of continual flux, where patient presentations ebb and flow during the day. They are involved in the triaging of a patient (the ACEM has introduced the National Triage Scale for all Australian Emergency Departments) as well as the management of seriously unwell or injured patients.

In the Field Hospitals, BASB medical platoons or the Mobile Field Surgical Teams (MFST), military personnel are likely to encounter trauma either due to battle or non-battle causes (e.g. motor vehicle accidents). Currently the senior surgeon initially triages patients before overseeing their assessment and resuscitation. In civilian practice, emergency physicians are heavily involved in the initial assessment and management of severe trauma. Many Australian emergency departments have trauma teams lead by emergency physicians, who coordinate various medical, nursing and allied health care professionals in the care of the trauma patient. As a consequence of their normal duties, emergency physicians have to work in a team on a daily basis, an essential requirement of a military medical unit, and be able to interact with a variety of specialists from a range of specialties.

I believe that the emergency physician in a military environment should continue their role, practiced on a daily basis, by being involved in the initial triage and assessment of the trauma patient. This would enable the surgeon to be unhindered in the theatre and would allow surgical review of resuscitated patients in order to triage the patients for surgery. This has worked well in the US military, with the literature reporting successful medical operations with emergency physicians involved in triage and resuscitation in both the 1989 invasion of Panama[1] and the 1991 Gulf War.[2] During Operation Habitat, I spent time with the UK Royal Marine Surgical Support Team (not unlike the MFST) in Iraq.[3] The triage officer was the Infectious Diseases consultant (they did not have any emergency physicians). Which enabled the surgeons to freely move about the resuscitation area and to take urgent cases to theatre. This system was established by the surgeons and worked extremely well. The other main

advantages of utilising the emergency physician is that the remaining cases in the resuscitation area can managed whilst the surgeon and anaesthetist are in theatre, the surgeon can be warned of new urgent or deteriorating cases, and new cases can be triaged and resuscitated as they arrive.

Trauma is a small part of the emergency physician's day, as it is for a military medical unit on exercise or operations. A significant part of the workload is the non-battle casualties who present with medical or minor surgical/orthopaedic problems. Even in combat there exists a significant amount of non trauma injuries. In the 1983 Grenada invasion, 11.8% of patients received on a casualty receiving ship were non trauma cases.[4] On the hospital ship, HMS UGANDA, during the Falklands war, 12% of casualties received were suffering from environmental or hypothermia injuries.[5] For the British Surgical Support Team in Iraq, 55.2% of patients seen were non-surgical cases.[3] This team, however, was deployed on a humanitarian operation. In the future, it is more likely that an Australian military medical force will have to deal with such a crisis and should be able to deal with civilians who have had their medical system destroyed and are faced with medical problems such as pneumonia, malaria, dehydration, and malnutrition. The majority of the day will be spent sorting out the ill from the not so ill. Triaging, diagnosing, performing investigations and initiating management, on all ages of patients from babies to the elderly, will be critical. Emergency physicians have a great range of skills in these areas, as well as their ability to resuscitate the seriously ill.

In civilian practice, the emergency physician is often involved in disaster planning and is regularly involved in mass casualty exercises. The emergency physician can, therefore, be a valuable resource for a military medical unit if deployed to a civilian disaster, either in Australia or overseas. Even in a combat environment with mass casualties, the emergency physician will be in a situation which is not unlike the daily situation in an Emergency Department where the resources are stretched due to either a crowded emergency department or 3-4 patients that arrive at the department from a major motor vehicle accident. From experience with civilian bombings,[7] the closest many emergency physicians may come to the situation on the battlefield, the literature repeatedly stresses that there are many casualties who have minor injuries, which may not require surgery. These cases, in a military scenario, could be easily managed by an emergency physician, whilst the surgeon is dealing with the more urgent cases in theatre.

The Vietnam War demonstrated the value of rapid evacuation by air and, since that time, aeromedical evacuation (AME) has been an important part of the military medical plan. In civilian practice, emergency physicians staff a large number of retrieval organisations. On any day in Australia, emergency physicians, often working closely with anaesthetic or in tensive care colleagues, perform retrievals by either fixed or rotary wing aircraft. In Cairns, 260 retrievals per year are performed, predominantly by emergency physicians and usually by helicopter. Therefore, emergency physicians have developed a lot of skill and experience in the AME of seriously injured and ill patients as well as developing the skills required in planning and coordination of retrieval from remote areas.

Conclusion

The emergency physician is a new breed of specialist who offers the military a great deal of flexibility and support in either disaster or combat situations. The emergency physician has the skills to be involved in the initial triage, assessment and stabilisation of seriously injured patients; the day to day running of a resuscitation area/treatment section; and the aeromedical evacuation of casualties. The literature tells us that, in the US military, the emergency physician has successfully performed these roles in military operations. The time has come for the Australian military to utilise this new speciality.

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