



Foreword by the Surgeon General

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This edition of the Journal provides the most comprehensive collection yet of UK medical experience on current operations. The underlying message is that more personnel are surviving their injuries than expected, that our quality of care for the injured exceeds that which is usually found in the UK, that almost all deaths that occur are unavoidable and that our success coincides with the introduction of a significant number of initiatives.

By the 15th February 2008 the Armed Forces of the United Kingdom serving in Afghanistan had suffered 87 fatalities, with 114 personnel seriously or very seriously injured or wounded (SIL or VSIL). 1,133 casualties had been admitted to field hospitals and 880 aeromedically evacuated to the UK [1]. The figures for Iraq are 174 dead, 212 seriously or very seriously injured, 2,695 admitted to field hospitals and 1,347 aero-medically evacuated [2]. The total number of UK deaths, 261, compares to 255 British deaths during the Falkland Islands campaign, 340 in the Malaysian campaign, 719 during the Northern Ireland Campaign and 765 in Korea [3].

What might distinguish the current conflicts medically from the other post WWII campaigns? I believe that the defining characteristic will be the speed with which enhancements or adoption of different approaches have been identified and introduced into our (and US) military medical services. Of course, this was not possible in the Falkland Islands (a short “come as you are” war with little or no time for responsiveness) or Northern Ireland (where the majority of care was provided by civilian medical services) or Korea, Malaysia and other similar wars (which were remote from the UK).

Many enhancements have simply been the adoption with only minor modification of civilian best practice, such as current military intensive care reported in this Journal [4] or the introduction of CT scanning. However, many have arisen from the rapid exploitation of new technologies, such as the introduction of haemostatic dressings, or are the result of careful scrutiny of data followed by the introduction of new protocols. Coagulopathy appears to be the common factor underlying many of these, and is described in this edition [5]. For many of these innovations we must pay tribute to the USA, and in particular the work originating from the Institute of Surgical Research in San Antonio. The US of course have a major (though clearly unwelcome) advantage arising from their casualty numbers which are a full order of magnitude greater than ours (they sustained 4,453 deaths during operations in and around Iraq and Afghanistan [6] over the period in which we sustained 261 dead). This facilitates statistically significant conclusions based on quality data. In each case where they have identified an enhancement, we have applied “due diligence” in order to satisfy ourselves that the claimed benefit is real, and introduced changes in clinical practice which reflect these developments. We have also sought to add to the body of medical knowledge through, for example, research at the Defence Scientific and Technical Laboratories (Dstl) at Porton Down.

We in the UK have also been pioneering new military medical approaches. The use of trauma scoring for military casualties, described by Smith et al [7] and the multi-disciplinary review of all deaths described by Hodgetts et al [8] will be seen to provide a more scientific approach to medical success on operations than the traditional ratio of Killed in Action to Died of Wounds (although for consistency the UK intends to calculate these based on the definitions used by the US). The development by the UK of Enhanced Medical Emergency Response Team (MERT-E which includes a doctor), described by Davis et al [9] has potential implications for both civilian and military trauma management as it has demonstrated that appropriate resuscitation may in addition to improving survival also extend the time before surgery becomes essential. The introduction of the MERT-E is also an important example of an innovation pioneered by local clinicians on the battlefield rather than one centrally introduced by higher headquarters, a point not stressed by the authors.

However, care must be taken not to assume that solutions adopted for the current conflicts are directly transferable to future operations in a different geographic or military environment. Various comments made about the place of forward, light, surgical teams, replicate similar comments made by various proponents, or opponents, of forward surgery ever since its introduction by the Australians in the Sinai Campaign in 1917. The military aphorism “we tend to fight the last war, not the present one” applies equally to military medical tactics! Indeed, there are even significant differences between the two current operations with the UK deploying neurosurgery in Afghanistan but not Iraq, based on an audit of clinical requirements, whilst the helicopter borne MERT-E is used almost exclusively in Afghanistan where evacuation distances, and thus times, are longer.

Full though this edition is of papers related to combat, it is but a snapshot of the current position, and it has not been possible to cover all current clinical issues. There is much more to report about internal medicine and the article on operational morbidity by Ollerton et al [10] describing the approach to addressing musculo-skeletal conditions makes the point in its introduction that this accounts for only 20% of presentations: how we manage the other 80% is clearly a matter of importance. There is unfortunately no room to cover aeromedical evacuation, at a time when our current management of the severely injured relies on the provision by the RAF of a “flying intensive care unit” which provides challenges never before seen on military operations and requires innovative approaches.

Nor has there been opportunity to cover mental health (which will be the subject of a future issue) or mild Traumatic Brain Injury which is clearly of concern to our politicians, the media and some of our patients or potential patients, and is the subject of a significant amount of ongoing research both within and funded by the Ministry of Defence. We must also consider how we publicise the interaction with welfare and after-care services which, though, not strictly medical, contribute significantly to the well being of our casualties. And, whilst this edition reports many initiatives, there is clearly further work to do to identify the relative contribution of each of the individual enhancements. Neither must we forget the individual, team or unit efforts, the contribution by trainers at, for example, HQ 2nd Medical Brigade or the other non-medical disciplines in, for example, armoured ambulance design, nor the bravery of our medical personnel, many of whom have performed well over and above that which can be reasonably expected. Our chief priority remains as ever our patients, most of whom are from the younger generation that many still write off as unworthy of their predecessors. We in the medical services see our young servicemen in health and we see them seriously ill with life changing injuries: who cannot be impressed by their quality? Their stoicism when injured, their steadfastness during treatment, and their bravery as they seek to return to as high a state of health and physical fitness as possible demonstrates that our youth can be the equal of any from previous generations.

That our current priority is ensuring maximal survival of combat injured does not cause me concern. It was and is the right priority, but the data (both published and yet to be published) indicates that we are probably achieving as much as can be achieved and that all who can be medically saved are being saved. Now, therefore, is the time to switch priorities. There is much to do. We must minimise loss of manpower, we must seek to ensure that the quality of survival of those that we can now save is as good as possible, we must address the concerns of the chain of command, public, politicians and patients, and we must try to understand what lessons the current conflict has for future operations and for better preparing our personnel. We cannot within the UK concurrently do everything “in-house”, not through lack of money (where I as Surgeon General can demonstrate a need, money has always been forthcoming) but through lack of human resources. We must therefore seek to engage with other national bodies, such as the Medical Research Council, and with international partners to share the workload, and as part of this decide where we put our own priorities. This special issue of the journal illustrates some (but not all) of the significant successes achieved by the Defence Medical Services but it is but a start on a journey that probably has some years to go. If the advances achieved so far are a foretaste of what is to come, we are in for some very interesting future editions.

References

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