Surgery in the War-Zone

Lt Gen GS Misra, vsm*

MJAFI 2006; 62 : 210-211

Key Words : War surgery

Volumes have been written based on the cumulative experience gained in various aspect of trauma in various campaigns and wars. In fact, the progress in surgical sciences has received an impetus with each war, and surgical residency without an adequate exposure to trauma should be considered incomplete training. Ambrose Pare [1], considered to be the father of military surgery said, “in the pursuit of his profession, a surgeon can wish no more welcome test of fire than the battlefield”.

The armies of the world, besides fighting conventional wars, see action in jungles, deserts, high altitude and mountains which provides the trauma surgeon the widest possible spectrum of surgical workload; be it cold injuries, mass casualties, in road traffic accidents, in mountains, or missile and explosive induced injuries. With rise in global ethnic aspirations there are pockets of insurgency, militancy and urban warfare that have added a new dimension to combat. These factors along with international commitments to peace-keeping missions in difficult and inhospitable terrains have forced new surgical doctrines suited to troops and the environment they are exposed to.

The principles of war surgery should be designed to do maximum good for maximum people, within the available resources. Intelligent planning, training anticipation of the needs during military operations puts military medicine in a different perspective. On ground, the task is carried out by a motivated and organized team, where each member knows and accepts his/her responsibilities. The circumstances differ hugely from one conflict to another and even within individual war zones. Rapid treatment and evacuation of casualties to definite care undoubtedly improves survival. However, the war environment is dangerous and recovery teams and routes of evacuation unsafe and unreliable [2]. One possible solution is to disperse forward surgical units widely around the war zone to bring forward care to

casualties, where principles of damage control surgery could be applied. Traditionally a forward surgical centre is the most visible morale boosting factor for a soldier, who is aware of the technical skill readily available to save his limb or life if such a situation arises. The design principle is to fix forward [3]. However, it is realised that no amount of treatment in a forward centre can convert even a walking wounded into a fighting fit soldier within a restricted time-frame. The medical system is often racing a biological clock and the outcome may be worsening of the untreated clinical condition. Hence what is required is timely and effective evacuation of the soldier in a stable condition to a centre with definitive treatment facilities, from where he will proceed for convalescence and recuperation.

Field surgery or surgery involving the combat troops engaged in operations now continues much beyond the forward surgical section, and there are number of situations when the casualties have to be transported by the fastest means to a specialized centre or a referral centre, underscoring the importance of a thorough triage. While a complex cranial surgery is not possible in such situations, a life saving decompression can certainly be done so that the patient reaches a neurosurgical centre with a reasonable Glasgow Coma Score.

Survival figures of the trauma patients are reflection of the cumulative experience of the surgeon and application of his/her skills to these patients. In this era of super specialisation and increasingly compartmentalized health care services the world over, Armed Forces Medical Services have to retain professional excellence in each of these spheres. Yet, we have to remember the need to have a holistic view of the injured patient and his/her problems. While we may specialize in various surgical disciplines, our focus should always be the injured soldier. Trauma surgery need not be a backwater discipline, but an exciting field where rewards in terms of patient survival and gratitude

---

*Commandant, AMC Centre and School, Lucknow.

to the surgeon and the anaesthesiologist is immediate.

References

1. J Singh. The healers and soldiers: The Kargil Saga <http://www.tribuneindia.com/2000/20000802/health.htm>. Accessed on 17 May 2006.
2. Jon Clasper, David REW. Trauma life support in conflict. *BMJ* 2003; 327: 1178-9.
3. Nigel R Tai, Doug B, Ken Boffard. Logistic costs of damage control. <http://bmj.bmjjournals.com/cgi/eletters/327/7425/1178#44595>. Accessed on 17 May 2006.

JOURNAL INFORMATION

The journal is indexed/abstracted by ExtraMED, Index Medicus of Southeast Asia, International Abstracts of Biological Sciences, Abstracts of World Medicine, IndMED, Hygiene and Tropical Disease Abstracts and EMBASE.

The IndMED database is accessible on internet at the website <http://indmed.nic.in>

Bibliographic details of the Journal available on Website <http://indmed.nic.in>

At present you will find full text articles for the year 2003-2004 at <http://medind.nic.in> in the site.

From IndMED site you can access, MJAFI Journal directly by typing in the search box **jid-maa**. If specific articles published in MJAFI are to be searched e.g. articles pertaining to malaria, type in the search box "**malaria and jid-maa**".

Articles can also be accessed directly at website www.google.com by feeding in keywords/author's name/title of the article.

Guidelines for authors appear in January issue every year.

Authors' Index, Subject Index and Contents of the Volume appear in October issue every year