

## Planning, Preparation and Organisation

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*The administrative arrangements made to provide comprehensive medical cover to battle casualties from Sri Lanka between October 1987 to January 1988 are highlighted in this presentation.*

*Keywords : Mass casualty management, battle casualty management, hospital administration during war, planning and preparation.*

Command Hospital Air Force is the largest hospital in Indian Air Force with 757 beds. Apart from its primary role of providing diagnostic and therapeutic Medical cover to its dependent population, the Hospital is actively involved in Training and Research. This peace time role is extended to the reception and management of casualties during hostilities.

Though not predefined as a hospital for evacuation of battle casualties, the Hospital received a total of 386 Sri Lanka operation casualties within a span of 34 days. The Hospitals geared up itself to meet the challenge and ensured the best possible standard of medical cover to the casualties.

### *Receipt of casualties*

The first casualty was received from Military Hospital (MH) Madras by service air on 2nd October 87. This was followed by another casualty by rail from MH Madras on 5th October 87. On 12th October 87 a message was received that 30 casualties were being evacuated from MH Madras by service air. Thereafter, casualties were received almost every day. Largest number of casualties received on a single day was on 14th October 87 when 81 casualties were received in three aircraft, followed by 50 casualties on 20th October 87. majority of the casualties were evacuated by service aircraft. Upto 14th October 87, the casualties were initially staged at MH Madras. Subsequently, casualties were evacuated by service aircraft directly from Sri Lanka. This was considered necessary in view of the fact that MH Madras is a smaller hospital with limited facilities for orthopaedic and maxillofacial

surgery. Staging also causes inconvenience to the patients and delay in definitive management.

### *Reception and Medical Documentation*

#### *At HAL Airport*

All casualties were received at the Air Field by a Casualty Reception Team. This team consisted of adequate number of surgeons, surgeon trainees, other medical officers, medical assistants and ambulances. Their duties included reception at Airfield, quick triage, transportation to the Hospital and liaison with the hospital receptions/control room.

#### *At the Hospital*

A Reception Area was Established below the IT wards in a covered car Park. This area was manned by 1 medical officer and 4 medical assistants round the clock and was equipped with casualty arrival information system and facilities like adequate stretchers, wheel chairs and trolleys.

#### *Triage*

A quick assessment of all casualties was done by Surgeon at the Reception Area. Serious cases needing life/limb saving surgery were sent directly to the operation theatre. Other serious cases were sent to IT Surgical/Surgical I. Rest were directed to other Surgical Wards.

#### *Medical Documentation*

Initial medical documentation for the walking wounded was done at the Reception Area. Documentation for serious cases was done at the wards.

#### *Ambulance*

Arrangements for total number of 10 Ambulance, 6 from hospital resources and 4 taken from the neighboring Air Force and Army units, were made for the reception and transfer of the casualties.



### *Surgical Cover*

The Hospital has an Operation Theatre complex consisting of six operating rooms and centralised system for oxygen, gas and suction. It is equipped with the modern equipment including an Orthopaedic Image Intensifier. Apart from the IT surgical, seven surgical wards were established with a total capacity of 350 beds. This was achieved by the discharge of the patients who did not require immediate medical attention and by utilisation of reserve bed capacity of this Hospital. The available hospital resources could partially meet the requirement of ordnance stores and other ward stores required for setting up the extra beds. Rest of the store items were obtained through concerned Equipment Depot. All concerned Sections and Departments were immediately activated to gear themselves up for the task at hand. These included the Departments of surgery, Anaesthesia, Orthopaedics, Radiology, Blood Transfusion, the Nursing services, Logistic section, MI Room, Medical stores and the Medical Statistics section.

### *Surgical Teams*

In order to provide surgical cover round the clock, three surgical teams were formed. Each team consisted of a senior surgeon, two graded surgeons and one trainee surgeon. In addition, two surgeons were attached to the casualty reception team for surgical cover to casualties while in transit from the Air field to the Hospital.

### *Anaesthesia Teams*

Three teams of Anaesthetists were formed to work in close liaison with the surgical teams. Composition of these teams was similar to the Surgical Teams.

### *Blood Transfusion Service*

A comprehensive list of all donors from all adjacent Army and Air Force units was made and a minimum of 10 donors were kept standby at any given time. The storage capacity of blood was augmented to 40 units. Provision of rare blood groups like 'A' and 'O Rh -ve' were catered for.

### *Central Sterile Supply Depot*

The functioning of the depot was stepped up to ensure adequate supply of sterile dressing materials and syringes. For this purpose, manpower was pooled in from other Departments not actively involved and one additional autoclave was procured.

### *Medical Stores*

113 Cylinders of Oxygen and 33 cylinders of Nitrous oxide were procured from Indian Oxygen Limited, Bangalore on 14th October 87. Adequate quantities of IV fluids and sets were airlifted from Armed Forces Medical College, Pune on 15th October 87. X-ray films of various sizes and 13 different types of essential life saving drugs in adequate quantities was airlifted from Armed Forces Medical Stores Depot, Bombay on 15th October 87. Other items like dressing materials, plasters, splints etc were held in adequate stock by the Hospital. By way of Medical Stores, the Hospital was fully geared up to manage 350 casualties by 15th October 87.

### *Psychological Care*

To strengthen their psychological support each individual casualty was interviewed regularly by a Psychiatrist. Adequate postal stationary was provided to them. Local relatives were encouraged to visit the casualties as frequent as possible and the visiting relatives from outstation were received and well taken care of by the Hospital staff, specially detailed for this duty.

Arrangements were made for the Air Force Wives' Welfare Association ladies to visit casualties and look into the day to day welfare of the casualties.

### *Computerization of Casualty Statistics*

In order to generate accurate, reliable and timely statistical data on the casualties and to facilitate continuous updating, the computer facilities were extensively used. Necessary software was developed by the Hospital Computer Cell. Computerised data outputs in respect of admission data, morbidity pattern,

disposal and mortality details of the casualties were available on line for day to day appraisal.

Other administrative arrangements included (i) a continuous liaison with the concerned Army and Air Force Authorities as deemed necessary for air evacuation of casualties, airlifting of drugs etc and procurement of other stores, and (ii) stepping up of the security arrangement in the area.

### **Conclusion**

Command Hospital, Air Force, Bangalore successfully performed its role in the management of battle casualties of Sri Lanka operation through a close knit team work of the medical professionals, suitably backed up by the administration and logistic support.