THE ROLE OF THE ANAESTHETIST IN DISASTER MANAGEMENT

Unlike in the past disasters have become a world wide problem. Both natural and man made disasters have contributed to loss of life and limb as well as to a strain on the budget of respective governments through out the world. Sri Lanka faces a similar situation due to the on going civil war as well as environmental changes brought about by changing weather patterns due to global warming. In the recent past Sri Lanka has experienced frequent floods, earth slips and even cyclones.

A disaster can be defined as a situation where the resources out do the number of casualties. Hence a disaster in an out post may not be a disaster in the city. There are a number of government organisations that come together to provide the necessary services in the event of a disaster in Sri Lanka. One such organisation is the Ministry of Health which now has a disaster planning unit under the Planning Unit of the Ministry.

What is the role of the Anaesthetist in the event of a disaster?

Anaesthetists in their day to day management is involved in resuscitation, critical care, anaesthesia, and pain management. Pain management not only in acute situations but also during rehabilitation in the alleviation of chronic pain.

Medical management in disasters consists of pre hospital care, evacuation, definitive care in hospital and rehabilitation. It is important to see how we the anaesthetists can be part of the team in the above areas.

Pre hospital care – This is the most important part in a disaster as early treatment in the first golden hour will decide whether the patient will survive or not. If minimal time is to be spent in initiating treatment a retrieval or an out reach medical team should be made available. This team should have a commander who will decide whether it is safe to proceed to the site or whether they need to stay in an area demarcated for the medical team until the all clear is given by the overall operations commander or incident commander. This becomes extremely important in the event of a fire, hazardous material and even floods and earth slips. Once the all clear is given the medical team can then proceed and start triaging. Again the team leader will be the one who will be triaging but depending on the situation and the number of casualties it will become necessary that several others in the team may need to do so. Therefore it is very important to be well versed in field triage by every single person in the team.

We use a colour coding which is practiced internationally so that there is no confusion. Three very simple signs – ability to walk, breathing and level of consciousness are the only signs used for triage which should be simple and quick if it is to be effective. Once triaged it is important to start treatment which will mainly be resuscitation and evacuation to the hospital according to priority.

The Anaesthetist plays a very important role in pre hospital care. He should be well versed with triaging and should take a lead role in resuscitation and assessment so that patients needing immediate in-hospital care reach the hospital as soon as possible.

Evacuation – During evacuation these patients must be packaged properly. All patients unless otherwise confirmed must be handled as if having a cervical, dorsal and lumbar spine fractures unless they are able to walk. They should all have a cervical collar, the neck movements restricted by means of sand bags and strapping across the forehead to the spine board and the dorsal and lumbar spines should be stabilised by means of strapping at the shoulder pelvis and feet. Intravenous lines and airway equipment along with frac packs should be well secured. As the anaesthetist is usually involved in resuscitation
and transport he will be the ideal team member to look after these aspects.

**Hospital definitive care**

1. **Intensive care** - It might be important to manage some of these critically ill patients in intensive care units. Hence the need to get as many beds as possible evacuated and ready to receive such patients. Today in Sri Lanka except a few, all other intensive care units are managed by Anaesthetists. As soon as a disaster is reported the intensive care units throughout the country must inform the number of beds that each of them can spare so that patients can be directly transferred to the unit without delay.

2. **Surgical intervention** – patients needing immediate surgical intervention should be transported to the closest hospital having such facilities. The incident commander should inform the hospital. Specialised cases need to be taken to hospitals with such facilities without delay after informing such hospitals even if they are far away so that necessary facilities are kept available as soon as the patient arrives, to attend to him. Helicopter facilities can be made use of, for quick transport.

**Pain management and after care** - Pain management is a very important aspect in disaster management. The acutely ill patient will be in severe pain, on the other hand may even need anaesthesia for extrication from the wreckage if the limb has to be spared to save the life. Therefore it is of utmost importance that the retrieval team should consist of several anaesthetists and they should be well prepared with oxygen, stocks of analgesics and even field anaesthetics like ketamine which serves a dual purpose of analgesia as well as anaesthesia.

**Rehabilitation** – During rehabilitation some of these patients can be in severe pain due to severing of nerves, phantom limb pain and nerve entrapment. They will need long term pain management if they are to lead a normal fruitful life. Finally, even though Anaesthetists have not been actively involved in disaster management, time has come to contribute the specialised knowledge we have, under the above categories to ensure complete care of the unfortunate victim who suddenly finds himself at the mercy of others. It is therefore important for the membership of the college to be part and parcel of the retrieval teams and disaster management teams in their respective hospitals.

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