Special Feature

Pre-hospital, Maritime In-Transit Care from a Role 2 Afloat Platform

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Abstract

Maritime In-Transit Care (MITC) is a new concept to allow the provision of pre-hospital care in the maritime environment within Role 2 Afloat (R2A) teams. This article describes the experiences of an Emergency Medicine nurse and a Medical Assistant who made up the MITC team on the recent R2A exercise on RFA CARDIGAN BAY. As well as describing their personal experiences, the concept of the MITC team is introduced and their role within R2A outlined.

Introduction

The Maritime In-Transit Care (MITC) team comprised Cpl Suzi Smith, an Emergency Medicine (EM) nurse currently working in the John Radcliffe Hospital Oxford, and MA Louise Whalley, a Royal Navy Medical Assistant working on HMS PORTLAND. MITC should not be compared to the Medical Emergency Response Team (MERT) currently used in Afghanistan. MERT has had years to evolve into the highly sophisticated capability that it is today; whereas MITC is still a relatively new concept and is continuing to develop. The MITC concept is for initial advanced ‘first aid’ in order to maintain the casualty in transit back to the Role 2 facility (Figure 1). Initial equipment set-up is straightforward as a medical officer is not part of the standard MITC team; therefore the more advanced medical techniques such as Rapid Sequence Induction (RSI) would not be undertaken. The MITC is a simple concept, able to provide Battlefield Advanced Trauma Life Support (BATLS) in a variety of platforms, such as helicopter, sea boat or RIB. As an EM nurse, Cpl Smith was able to carry strong analgesia in the form of intravenous morphine and administer these under Patient Group Directives (PGDs) written by the EM consultant. Equipment was kept to a minimum due to the space constraints in the various air or sea assets that would be employed to retrieve patients. Medical bergens were used, again limiting the equipment that could be carried. (Figure 2).

Exercise experience

During the first day of the Mass Casualty exercise, there was an explosion on board a merchant vessel, with a casualty estimate of 6. This would exceed the 2-1-2 capability R2A could provide: therefore there was a need for the MITC team to fly 2 casualties to USS PONCE (a US support ship). The USS PONCE also had a Role 2 capability but this was smaller than the one onboard RFA CARDIGAN BAY; the team was composed of 9 persons as opposed to the 18 we had available. The air asset used for this transfer was a US AH 60 Seahawk. The cab was able to hold 2 stretcher casualties and allowed the 2 MITC members to gain 360-degree access to both patients. We were also allowed to take onboard our Propaq monitors and oxygen cylinders.

Day 2 of the ‘Mass Cal exercise’ saw an explosion onboard HMS QUORN, a Mine Counter Measure Vessel (MCMV). There were 4 casualties plus a man overboard for the incident. One issue for the MCMV is that there is no landing spot for a helicopter, and at the time of the incident HMS QUORN was too far away for a sea boat transfer. This meant that the Seahawk needed to be used for its winching capability. After landing on RFA CARDIGAN BAY the Seahawk crew picked up only one MITC member, due to space restrictions during winching operations. It was a 7-minute flight over to HMS QUORN, and during this time the US Crewman was getting into his swimming gear, as he was a qualified ‘Rescue Swimmer’. The other crewman and the MITC Nurse were both on gunners’ belts in the cab in order to allow free movement, to help the rescue swimmer and the subsequent casualty. On arriving at the scene it was ‘all eyes’ looking out for the man overboard. Once the marker had been spotted a flare was thrown out into the water near him to identify the spot for the Rescue Swimmer to jump into. The Seahawk then came down into a very low hover to allow the Rescue Swimmer to jump safely in. When he had reached the casualty, a stretcher was thrown in and we flew higher to minimise the downwash affecting them. Once secure, the ‘casualty’ was
winched up in a stretcher and Cpl Smith started work. Due to the warm temperature of the water the casualty was not hypothermic but had sustained a simulated broken femur in the explosion. It was then necessary to practise winching a casualty off the deck of HMS QUORN, which was very tricky due to the superstructure of the ship leaving little room for the Seahawk to hover (any wrong move would have resulted in the rotors hitting the ship). The casualties were then flown to RFA CARDIGAN BAY, with the man overboard casualty being transported to the USS PONCE, in order to off-load some of the casualties and prevent the UK R2A being overwhelmed.

Lessons learned
Overall, the exercise went well and we were able to highlight some issues with kit and equipment. The challenge was expected to come when working within a multinational environment, due to differences in practices and procedures. However, the Americans were extremely helpful and cooperative, allowing us to have a lot of say in what we wanted to put into the back of their Seahawk and what we wanted to be able to do with the casualties. They allowed us time to gain vital experience of flying in the restricted space on the helicopter with ‘casualties’ and we were very grateful for their efforts. On the whole the MITC team as a concept worked well within the R2A environment. It will continue to evolve, but in our experience an EM and a Royal Navy Medical Assistant were able to provide advanced pre-hospital care to casualties from the point of wounding to Role 2 care at a high standard, within the constraints of transfer at sea and by air with the limited equipment available.

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