

**A05.EMSG. Why MICAS?**

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**Introduction:** The Mobile Intensive Care Ambulance Service (MICAS) was initiated in 1996 to assess, stabilise and transfer critically ill patients from a referring hospital to a receiving hospital to meet their clinical needs. Critically ill patients are transferred throughout Ireland to an increased level of care, repatriation for continuity of care following specialist treatment, specialist critical care services or in some instances, are considered too unstable to be transported by local staff.(1,2) In 2015, it was estimated that approximately 1,000 ICU patients are transported per annum.(3) These numbers are likely to increase as a result of the reorganisation of health services, the development of hospital groups, the establishment of the hub and spoke critical care services and introduction of trauma centres. This increases the requirement of inter hospital transfers throughout the country. **Aims:** The aim of this audit was to establish the rationale for a critical care retrieval service and to evaluate the adverse events for inter hospital transport of critically ill patients in Ireland over a 3 year period. **Methods:** A retrospective chart review of all patients transported by MICAS between January 2015 and December 2017 was undertaken. Clinical records were reviewed for acuity and for adverse events. **Results:** 339 patients were transported in this timeframe with 7% experiencing an adverse event overall. **Conclusion:** The MICAS data shows an increasing number of critically ill patients transferred by MICAS within the timeframe. The rationale for MICAS includes the provision by a specialist team with transport specific equipment with reduced adverse events.

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**A06.EMSG. Advanced Paramedic Delivered Finger Thoracostomy**

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**Introduction & Aims:** Tension pneumothorax is a potentially fatal but reversible injury encountered in major trauma and traumatic cardiac arrest. Needle decompression has been the standard treatment approach pre hospital in Ireland and internationally. However, concerns exist regarding the effectiveness of this approach due to anatomy and body habitus. We aim to describe the training, introduction and experience of finger thoracostomy by advanced paramedics within a pre hospital service in Ireland. **Methods:** Finger thoracostomy has been advocated as an alternative pre hospital treatment which is both diagnostic and therapeutic. Paramedic delivered thoracostomy is commonplace in pre hospital critical care services internationally. The MCI Medical Team (as part of Motorsport Rescue Services) is a PHECC-registered multidisciplinary team which provides medical cover at motorcycle road racing events in Ireland. The MCI Medical Team has significant experience of major trauma and routinely performs pre hospital anaesthesia for trauma patients. We introduced a training module on finger thoracostomy, comprising: theory, practical instruction and assessment for advanced paramedic members of the team. **Results & Conclusions:** Advanced paramedic members of the team we trained to deliver finger thoracostomy in predefined circumstances when operating as part of the MCI medical team. To date, advanced paramedic delivered finger thoracostomy has been utilised on three occasions. Introduction of advanced paramedic delivered thoracostomy is a feasible and effective technique for the treatment of tension pneumothorax within a closely governed system.

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