Management of the Burn Injured Patient

Developing a burn education programme utilising medium fidelity simulation
Claire Swales, Veronica Wagstaff, Fiona Coia

Background
Burn injury is one of the most devastating forms of trauma which can have physical, psychological and social consequences (Blakney et al, 2007). It requires a multidisciplinary team (MDT) approach for optimum outcome (Butler, 2013). An in house training programme has been developed at Pinderfields Hospital in Wakefield to improve the knowledge, clinical skills and competency of the team working within the burn service to deliver a high quality, evidence based service. Burn care is a specialist discipline which requires specialist knowledge and skills. In accordance with the National Burn Care Standards (2013) the Northern Burn Care Network have devised a competency based portfolio of evidence. This aims to generate a uniform approach in assessing competency within burn care which is utilised as the basis for the training programme delivered within the burns service at Mid Yorkshire.

Methodology
The training programme is still in its infancy, and has been delivered utilising a variety of teaching methods including medium fidelity simulation, didactic teaching, case based discussions and a simulated burn scenario in a mock clinical environment.

Taught skills included:
• Calculating burn size and depth
• Calculating fluid requirements
• Escalation of care
• Burn wound management
• Dressing selection and application.

Results
Eight participants engaged in the simulated scenario which was about the admission of a patient with a significant burn. On completion of a questionnaire it was felt that the training reinforced the importance of early intervention and the need to calculate burn size, depth and appropriate resuscitation fluids which they were given the opportunity to do in this scenario.

Conclusion
Simulation has been found to be a reliable tool in assessment and of both teamwork and communication skills (Okuda, et al 2009). Clinical medicine is increasingly focused on patient safety issues and quality. Understandably patients are reluctant to have staff ‘practice’ on them, so simulation allows us to bridge the educational gap and train the multi-disciplinary team in theory, practice and human factors in a realistic and safe clinical environment (Wilford and Doyle 2006).

Feedback
"Enjoyed the simulation session as it reinforces the importance of early intervention and resuscitation"  
"Excellent course and presentation"

Recommendations
A post course questionnaire was performed 12 weeks after the course to evaluate effectiveness of teaching, recommendations included:
• Full day training
• Development of further adult and paediatric scenarios
• Pre and post course confidence questionnaire
• Further training to achieve a more realistic burn injury for the ALS manikin
• 2 day course undertaken with TraumaFX to learn about moulage application.

References

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Contact the authors
Claire Swales | claire.swales@midyorks.nhs.uk
Veronica Wagstaff | veronica.wagstaff@midyorks.nhs.uk
Fiona Coia | fiona.coia@midyorks.nhs.uk