

Physical Respiratory Management Techniques

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Optimising the respiratory status of burn survivors is the subject of many papers. Respiratory problems arise due to the systemic inflammatory response syndrome (SIRS) and, or inhalation injury. Recently, Cancio et al (2007) and Bartley et al (2008) documented the evidence for the medical (team) and pharmacological management of inhalation injury. The vast majority of this evidence has been amassed through animal studies and expert opinion and provides little evidence to guide practice in the application of physiotherapy techniques.

Further, while there is a good understanding of the progression and sequelae of SIRS and inhalation injury, there is a reluctance to provide early physical interventions for these patients according to a survey of ANZBA burn and ICU physiotherapists. This fact has almost certainly been compounded by the turmoil in recent years related to the published efficacy of physical respiratory therapy techniques in the critical care and chronic airway limitation populations. The uniqueness of the respiratory challenges faced after burn injury must be appreciated before research can progress in this area.

The focus of this presentation will be to examine the issues of, and evidence for, prophylactic and timely physical input to optimise oxygen exchange in the wound healing period and, return to normal activity, including sport, during the scar proliferation and maturation phases after burn injury.

References

- Bartley, A. C., Edgar, D. W. et al. (2008). "Pharmaco-management of inhalation injury for burn survivors." Drug Design, Development and Therapy 2: 9-16.
- Cancio, L. C., Batchinsky, A. I. et al. (2007). "Inhalation injury: Pathophysiology and clinical care. Proceedings of a symposium conducted at the Trauma Institute of San Antonio, San Antonio, TX, USA on 28 March 2006." Burns 33(6): 681-692.