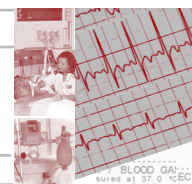


# Making respiratory support safer



This issue of the *Southern African Journal of Critical Care*, which coincides with the 2005 COPICON congress, carries review articles on ventilatory therapy of critically ill patients.

Giles offers a comprehensive review and practical guidelines on the provision of non-invasive ventilatory support, while Hamel and Cheifetz focus on the non-conventional mode of high-frequency oscillation, providing in-depth background information on the development and physiology of this mode of therapy, and outlining practical clinical guidelines for its initiation. Finally, Williams reviews the issue of humidification of inhaled gases, an essential part of the provision of respiratory support.

Respiratory support has become a key component in the management of critically ill patients in the modern intensive care unit. This support may be initiated for respiratory failure or as part of broader supportive measures in other critical illness.<sup>1</sup>

The last two decades have witnessed not only the development of increasingly sophisticated methods of conventional ventilation, but also the increasing use of both non-conventional and non-invasive modalities of mechanical ventilatory support.<sup>2-4</sup>

As the medical care of patients advances and becomes technically more sophisticated, physicians and other caregivers will require in-depth understanding of medical equipment that although increasingly complex should have fewer faults, and therefore be safer for patients.<sup>5-7</sup>

The articles in this journal are important, as despite the advances made, the provision of effective, safe, lung-protective ventilatory support still constitutes a major challenge to all intensivists.

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1. Oh TE, Tan IKS. Mechanical ventilatory support. In: Oh TE, ed. *Intensive Care Manual*. London: Butterworth-Heinemann, 1997: 247-255.
2. Marraro GA. Innovative practices of ventilatory support with pediatric patients. *Pediatr Crit Care Med* 2003; **4**(1): 8-20.
3. Froese AB, Kinsella JP. High frequency oscillatory ventilation: lessons from the neonatal/pediatric experience. *Crit Care Med* 2005; **33**(3): S115-121.
4. Teague WG. Non-invasive positive pressure ventilation: current status in pediatric patients. *Pediatr Respir Rev* 2005; **6**: 52-60.
5. Brower RG, Rubenfeld GD. Lung protective ventilation strategies in acute lung injury. *Crit Care Med* 2003; **31**(4): S312-S316.
6. McGee WT. Cost associated with mechanical ventilation. In: Hill NS, Levy MM, eds. *Ventilator Management Strategies for Critical Care*. New York: Marcel Dekker, 2001: 79-106.
7. Thierry G, Boyer A, Pgne E, et al. Heat and moisture exchangers in mechanically ventilated intensive care unit patients: A plea for an independent assessment of their performance. *Crit Care Med* 2003; **31**(3): 699-704.