

# Early physical and occupational therapy beneficial for ICU patients

Richard Philip

**R**ousing intensive care unit (ICU) patients from sedation to give them physical and occupational therapy as early as possible during critical care, improves their functional independence, and reduces their duration of ICU-related delirium and ventilator-aided breathing, US researchers have found.

The “loss of independence during acute hospital admission can be profound, even in the absence of critical illness ... Mobilization is prescribed to maximize return to independence ... However, mechanical ventilation and sedation displace these therapies from routine practice in the earliest days of critical illness,” wrote Dr. John P. Kress of the University of Chicago, US, and colleagues, who conducted the study.

“In this study we implemented daily interruption of sedation combined with mobilization done within 48 hours of the start of critical care; this method is distinct from previous studies of mobilization. This study shows the safety of this early intervention and quantifies clinical benefit,” the authors stated.

A total of 104 mechanically ventilated, critically ill patients were randomized to either early physical and occupational therapy during daily interruption of sedation

(intervention group;  $N=49$ ) or standard care comprising of daily sedation stops with physical and occupational therapy as called for by the primary care staff (control group;  $N=55$ ).

Results showed that 59 percent of patients in the intervention group achieved independent functional status compared to only 35 percent in the control group ( $P=0.02$ ). Subjects in the intervention group also had

**“ This study is very important because it confirms what experienced ICU physicians feel – the earlier you get your patient up, the better the outcome**

a shorter period of delirium (2 days versus 4 days;  $P=0.02$ ) and more ventilator-free days (23.5 days vs 21.1 days) compared to controls. [*Lancet* 2009 May 14 DOI:10.1016/S0140-6736(09)60658-9]

“This study is very important because it confirms what experienced ICU physicians feel – the earlier you get your patient up, the better the outcome,” said Associate Professor Philip Eng, a consultant respiratory and ICU physician at Mount Elizabeth Hospital, Singapore.



*Interrupting sedation to give ICU patients physical therapy is associated with better outcomes, according to recent research.*

When asked whether the treatment strategy used in the intervention group is used for ICU patients in Singapore, Eng said that “the exact prevalence of such practices in Singapore is presently unknown” but noted that many ICU physicians in Singapore are “open to such a strategy involving a mul-

## Industry UPDATE

*Industry Update brings you updates on disease management and advances in pharmacotherapy based on reports from symposia, conferences and interviews as well as the latest clinical data.*

*This month's Industry Update was made possible through unrestricted educational grants from Abbott.*

Targeted nutritional therapy effective in hard-to-heal wounds

..... Pg VIII

tidisciplinary team involving pharmacists, occupational and physical therapists.”

Besides the benefits seen in the study, Eng said that getting the patient awake and exercising early would mean using “less drugs in the bigger scheme of things, resulting in an earlier return to the previous functional state.”

Noting that the study involved a small number of patients from only two medical centers, Eng called for a larger study involving patients from ICUs all over the world to be done. “The main hurdle is for physicians to recognize that such a strategy is not just effective, but also safe,” he concluded. **MI**