Bed to bedside: Plan for early mobilization

Sir,

We recently read a nicely written article on mobilization of critically ill patients in ICU by Pattanshetty *et al*.[1]

We thank the author for such a detailed description of the physiology of mobilization and immobilization. Interventions during critical illness, such as sedation, analgesia and neuromuscular blockade with prolonged immobilization contribute to neurocognitive impairment, physical disability and ICU acquired weakness (ICU-AW).[2] Inactivity and prolonged bed rest are unnatural states of the human body and is associated with muscle atrophy, pressure ulcers, atelectasis and bone demineralization and results in significant long-term morbidity and increased healthcare resource utilization. As the mortality from critical illness has improved in recent years, there has been increasing focus on patient outcomes after hospital discharge. Early mobilization may be one such practice with the potential for altering both short- and long-term outcome.[3]

Given the intensive monitoring and treatment accompanying critical illness, early mobility often fails to be a high priority in daily ICU patient care. Early physical and occupational therapy is feasible from the onset of mechanical ventilation despite high illness acuity or presence of life support devices. Adverse events are uncommon even in this high-risk group.[3] Barrier to early mobilization of ICU-patients is mainly lack of prioritization. The need for early activity in critically ill patients was recently reinforced by European guidelines for physiotherapy in ICU. Early mobilization begins immediately after physiological stabilization, which involves neurologic, respiratory, and cardiovascular stability.

Mundy *et al*, in a very well designed, randomized controlled trial reported that early mobilization resulted in improved outcomes, decreased length of stay, with concomitant savings in the intervention group without increasing the risk of adverse outcomes. The most impressive differences in the length of stay were in patients with a pneumonia severity index (PSI) class III. Mobility has been recognized as a component of primary, secondary, and tertiary prevention of overall disease morbidity and mortality.[4] Early mobilization improves the functional outcome and more ventilator free days and less incidence of ICU delirium.[5]

We routinely practice early mobilization of ICU patients in our institution, which is a tertiary care referral centre [Figures 1-3]. Early mobilization includes early limb physiotherapy, mobilization in the bed, mobilization in bedside chair or wheelchair, or makes the patient stand or walk with support, depending on the clinical condition of patient. Other than better outcome, it gives a moral boost to patient, family as well as the ICU staff.

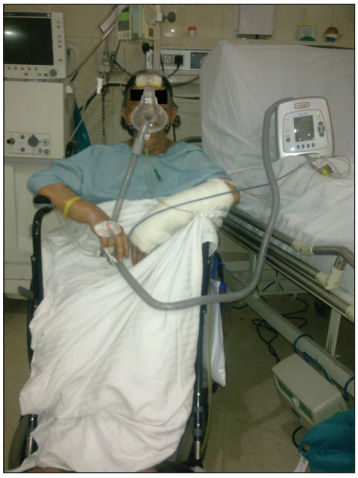

Figure 1: Patient with difficult to wean off ventilator with poor cough reflex

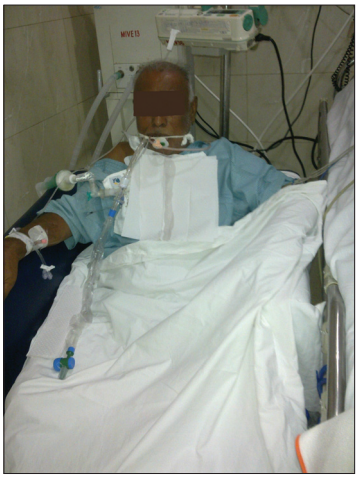

Figure 2: Patient with severe community acquired pneumonia

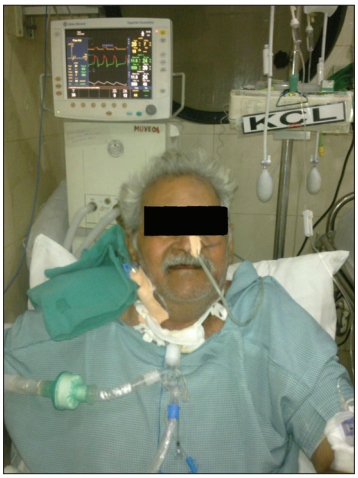

Figure 3: Patient with 1 month history of severe acute pancreatitis with multiple organ failure

Also sometimes, it is very easy for patient and family to understand the clinical status of patient, by the stage of mobilization. Now, early mobilization is an integral part

of our ICU care and every patient is assessed daily for feasibility of mobilization.

Rajesh Chawla, Rakesh Sharma, Sananta Kumar Dash, Sudha Kansal
Critical Care Medicine, Indraprastha Apollo Hospital, 0076 Sarita Vihar, New Delhi, India

Correspondence to:
Dr. Rakesh Sharma,
Raj Niwas, 1-A, Swatanter Nagar, Narela,
Delhi - 110 040, India.
E-mail: hemarak1508@gmail.com

References

1. Pattanshetty RB, Gaude G. Critical illness myopathy and polyneuropathy: A challenge for physiotherapists in the intensive care units. Indian J Crit Care Med 2011;15:78-81.
2. Griffiths RD, Hall JB. Intensive care unit-acquired weakness. Crit Care Med 2010;38:779–87.
3. Bailey PP, Miller RR, Clemmer TP. Culture of early mobility in mechanically ventilated patients. Crit Care Med 2009;37(Suppl):S429–35.
4. Mundy LM, Leet TL, Darst K, Schnitzler MA, Dunagan WC. Early mobilization of patients hospitalized with community-acquired pneumonia. Chest 2003;124:883-9.
5. Brahmbhatt N, Murugan R, Milbrandt EB. Early mobilization improves functional outcomes in critically ill patients. Crit Care 2010;14 321.

Access this article online

Quick Response Code:

Website: www.ijccm.org

DOI: 10.4103/0972-5229.102103