

Early Patient Mobilization Key to Earlier Patient Recovery



THE PROBLEM

Physical deconditioning of ICU patients from illness, sedation and prolonged bed usage can occur within days of patient admission. The effect of deconditioning of the patient include weakness and neuromuscular abnormalities within 7 days of an ICU stay¹, skeletal muscle strength may decline 1 to 1.5 percent per day of bed rest and up to 50% of the total muscle mass in two weeks². Muscles that maintain posture, transferring position and ambulation tend to be the muscle groups that lose strength most quickly³. In addition, decrease in cardiovascular and respiratory reserves, neuropathies and myocardial dysfunction can also occur due to prolonged immobility³.

THE BENEFITS

The benefits of mobility in traditional rehabilitation settings can also be seen in the ICU. The heart is 30% more efficient when not in a supine position as oxygen consumption is decreased. Venous stasis, thrombophlebitis, deep vein thrombosis, and pulmonary emboli are all preventable by patient mobility. Kidney and urinary functioning are more effective in mobile patients.¹

STUDIES

Recent studies have discussed the benefits of early mobilization. Bailey et al proposes that activity earlier in the patient stay is a candidate therapy to prevent or treat neuromuscular complications of critical illness⁴. Perme et al suggest that improving mobility of patients has the potential to facilitate weaning from ventilation and improve outcomes of transplantation⁵. Stiller believes that mobility may decrease duration of mechanical ventilation and length of ICU and total hospital stay. Stiller also discusses the safety factors such as having to deal with patient attachments⁶.

REDUCED LENGTH OF STAY

Peter Morris MD conducted a study to address the lack of data on early mobilization. The study found

that patients receiving earlier mobility had their length of stay reduced by 3 days compared to the stay for patients who did not receive early mobility. This reduction included a reduced ICU stay by more than a day³. The study also found that patients receiving early mobilization were out of bed earlier, progressed more quickly to active physical therapy and experienced no adverse events during ICU therapy sessions⁷.

REFERENCES

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