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Latest research on physical therapy in ICU setting a 'surprising reversal'

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In a surprising reversal, researchers have determined that a particular protocol providing physical therapy to ICU patients with acute respiratory failure did not shorten hospital length of stay.

Secondary measures of physical function and health-related quality of life were split.

The study, which is the largest to-date on this topic, was not able to confirm the findings from earlier pilot and quality improvement studies.

"This results are astonishing and somewhat controversial. We all expected the results to be positive," said Peter Morris, MD, corresponding author for the study, which was published in the current issue of *JAMA*. "This doesn't sound the death knell for the concept of early rehabilitation in the ICU, but we need to explore new delivery methods and timing."

The study randomized 300 ICU patients to receive either standardized rehabilitation therapy or routine care. Outcomes were measured by hospital length of stay (LOS) and other secondary outcomes, such as physical function and health-related quality of life, which were assessed at hospital discharge and again at two, four and six months post-discharge.

The researchers found no difference in median hospital LOS between the group that received therapy and the control group that received

routine care. Some of the strength measures were the same in both groups at each interval; however objective measures of function and self-reported quality of life were improved in the test group at six months post-discharge.

According to Morris, it's been a long-accepted point of view among medical professionals that early intervention with ICU patients could have a positive effect on outcomes, and the findings from this study signal a need for reexamination of established views in the field of early ICU rehabilitation.

"We've known for a long time that spending even short periods on life support can elicit long-term physical and psychological effects, and pilot studies on smaller cohorts implied that physical therapy could help alleviate that," he said. "But the protocol we tested didn't bear this out."

Morris cautions against abandoning all exploration of the concept, however.

"I'm optimistic that some form of therapy can provide some long-term benefit to patients on life support."

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