
The safety of mobilization and its effect on haemodynamic and respiratory status on intensive care patients

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Setting the scene:

They investigated the safety of mobilizing acutely ill in-patients, in particular the effect of mobilizing on their haemodynamic and respiratory parameters.

What did they do?

Thirty-one patients in an intensive care unit (ICU) deemed suitable for mobilisation, based on a comprehensive screening process, and received 69 mobilisation treatments in total. These treatments most often included sitting on the edge of the bed and standing. Outcome measures including heart rate, systolic and diastolic blood pressure, and percutaneous saturation of oxygen, were measured prior to, during and after mobilisation. Additionally, any deterioration in clinical status, and intervention required for it, was noted. On the majority of occasions (91.3%), pre-treatment data from patients indicated marginal cardiac and/or respiratory reserve. During mobilisation, significant increases were seen in heart rate and blood pressure, while percutaneous oxygen saturation decreased (not significantly). These changes were generally of small magnitude and did not require any specific intervention. On three of the 69 occasions of mobilisation (4.3%), clinical status deteriorated, requiring intervention. For all three patients involved, this was a fall in oxygen saturation, requiring a temporary increase in the inspired fraction of oxygen to stabilise respiratory status.

Takeaway message:

Although mobilisation resulted in significant increases in heart rate and blood pressure and a non-significant fall in percutaneous oxygen saturation, the ICU patients in this study deemed suitable for mobilisation were able to be safely mobilised.