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Early Mobilisation of Critically Ill Obese Patients

Obesity is increasing at an alarming rate across many countries throughout the world. As a consequence, we are more frequently challenged with the management of obese patients in our Intensive Care Units (ICUs) (Akinnusi et al. 2008; Hogue, Jr. et al. 2009; Oliveros and Villamor 2008). Obese patients have an increased risk for thromboembolic disease, pressure ulcers, prolonged mechanical ventilation, deconditioning, and poor physical function (Charlebois and Wilmoth 2004). Due in part to such complications, obesity is associated with an increased length of stay (Akinnusi et al. 2008; El-Solh et al. 2001; Hogue, Jr. et al. 2009). Bed rest and immobilisation, which are common in mechanically ventilated patients, may further contribute to these complications of ICU care.

Early Mobilisation of Obese Patients in the ICU

Early mobilisation of obese patients in the ICU aims to preserve physical function and prevent complications associated with bed rest and obesity. Compared to other ICU patients, critically ill obese patients may require additional resources for support and balance during rehabilitation activities; however, mobilisation is still feasible with an interdisciplinary team approach and appropriate planning and coordination.

Physiotherapy treatments aimed at mobilising obese patients must be coordinated with other healthcare professionals, including respiratory therapy and nursing staff. It is important to maintain patient confidence, motivation and safety awareness during mobilisation. Obese patients may feel discouraged or reluctant to participate in mobilisation activities. Such patients may benefit from positive support and education on the importance of daily physical activity, particularly in the ICU setting. The patient should be involved in setting daily goals for mobilisation therapy in order to advance their mobility from previous sessions. The entire healthcare team should provide positive reinforcement for participation in mobilisation activities. ICU clinicians can assist with mobilisation through minimising deep sedation and ensuring appropriate mechanical ventilator settings to support respiratory effort and maintain patient comfort during mobilisation (Korupolu, Gifford, and Needham 2009; Needham 2008).

Mobilisation of obese patients often requires consideration of appropriate staffing and specialised bariatric equipment. Two or three staff members may be required to assist a physiotherapist in transferring an obese patient from laying to sitting, from sitting to standing and during ambulation. However, such staffing may be reduced with appropriate equipment. For example, transfer boards can assist the patient and therapist in safely performing lateral transfers. In addition, a bariatric patient lift, bariatric chair and walker can assist with graduated mobility activities in obese patients. Such equipment may be important in reducing workrelated injuries among ICU and rehabilitation staff and decrease the risk of related patient injuries (Charney and Hudson 2004).

Conclusion

Recent studies have demonstrated that early mobilisation is safe, feasible and beneficial in ICU patients (Bailey et al. 2007; Morris et al. 2008; Schweickert et al. 2009). However, early mobilisation has not been specifically evaluated in critically ill obese patients. In our experience, early mobilisation of critically ill obese patients is feasible with interdisciplinary teamwork and patient education. Specialised bariatric equipment may improve the feasibility and safety of mobilisation activities. Future studies are needed to more fully understand the benefits of early mobilisation in obese patients in the ICU setting and to develop specific evidence-based guidelines.

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