**Early Mobilization During Femoral Extracorporeal Membrane Oxygenation: A Single-Center Feasibility and Safety Study**

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Background: Bed rest is common in intensive care units (ICU) and is associated with intensive care unit-acquired weakness (ICU-AW), reduced survival, impaired quality of life, and increased healthcare costs. Patients receiving femoral extracorporeal membrane oxygenation (ECMO) are frequently confined to bed because of concerns regarding cannula displacement. Evidence regarding the feasibility and safety of early mobilization in this population remains limited. Objective: To evaluate the feasibility and safety of early mobilization in critically ill patients receiving ECMO support in a ICU in Rio de Janeiro, Brazil. Methods: This retrospective cohort study included adult patients who required ECMO support between March 2022 and June 2026. Demographic and clinical data, ECMO indication, configuration and duration, highest mobilization level achieved, adverse events, need for mobilization interruption, functional status at ICU discharge, and outcomes were collected. Mobilization followed a standardized institutional protocol with multidisciplinary team involvement and predefined safety criteria. Results: Sixty patients were included; 33 (55%) were male, with a mean age of 50±16.2 years, and 50% had a normal body mass index. Main ECMO indications were complex surgery (45%), acute respiratory distress syndrome (35%), and cardiogenic shock (20%). ECMO configurations included venovenous (VV) in 44 patients (73.3%), venoarterial (VA) in 13 (21.7%), and hybrid VVA/VAV in 3 (5%). Mean ECMO duration was 17±29.3 days, and all patients had at least one femoral drainage cannula. During ECMO support, 15 patients (25%) achieved ambulation, 19 (31.7%) reached standing, and 11 (18.3%) performed bedside sitting. Among mobilized patients, 93.3% were receiving vasoactive medications and had multiple invasive devices. Fourteen patients (23.3%) experienced mild adverse events. Mobilization was interrupted in six cases due to atrial fibrillation with rapid ventricular response (n=2), increased work of breathing (n=2), drainage cannula chatter (n=1), and lower-limb pain related to the return cannula (n=1). No major complications or cannula-related adverse events occurred. Among survivors (58.3%), 82.8% were discharged from the ICU able to ambulate (ICU Mobility Scale >7) after a mean ICU stay of 45±49 days.

CON EL RESPALDO

Conclusions: Early mobilization during ECMO was feasible and safe, including patients with femoral cannulation, vasoactive support, and multiple invasive devices when performed according to a standardized multidisciplinary protocol.

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