State of the Science in Hospice and Palliative Care

Concurrent Oral Session Abstracts

Effectiveness of an Algorithmic Approach to Ventilator Withdrawal at the End of Life (SAPLEN 101)

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Outcomes.

1. Describe the vulnerability of patients undergoing the withdrawal of invasive mechanical ventilation
2. Describe the effectiveness clinical trial

Importance. The transition to spontaneous breathing puts patients who are undergoing ventilator withdrawal at highest risk for respiratory distress. The approach to this care process is often reliant on local unit custom. A patient-centered algorithmic approach is needed.

Objective(s). Demonstrate that the algorithmic approach is effective to ensure greater patient respiratory comfort compared to usual care; determine whether algorithm-guided withdrawal will be associated with differences in opioid or benzodiazepine use compared to usual care.

Method(s). Patients are randomly assigned to algorithm and usual care groups via a stepped-wedge cluster randomized clinical trial design. Sites crossed over to the algorithm in random order after usual care data were obtained. Patient comfort was measured with the Respiratory Distress Observation Scale (RDOS) at baseline, at ventilator off, and every 15 minutes for an hour. Parenteral morphine and lorazepam equivalents from the onset of the process until patient death were used. The algorithm prescribes either ventilator weaning or one-step cessation based on patient distress and baseline consciousness; medication use is guided by RDOS scores.

Results. Usual care data n = 120, algorithm data n = 48. Gender and race (White or Black) were evenly distributed. All patients in the usual care arm underwent a one-step ventilator cessation; 58% of patients in the algorithm arm were weaned over an average of 18 ± 27 minutes. Patients had lower RDOS scores in the algorithm arm at the time the ventilator was turned off ($t = -2.8$, $p = .006$), at 15 minutes ($t = -2.34$, $p = .021$), and at 30 minutes ($t = -1.92$, $p = .057$). More opioids ($t = -2.30$, $p = .023$) and benzodiazepines ($t = -2.08$, $p = .040$) were given in the control arm.

Conclusion(s). The algorithm is effective in ensuring patient respiratory comfort. Of surprise, more medication was given in the usual care arm; however, less may be needed when distress is objectively measured (RDOS), as in the algorithm.

Impact. Ventilator withdrawal is a common procedure for dying patients in the critical care setting.

A Randomized Controlled Trial of a Chaplain-Led Spiritual Care Intervention for the Surrogate Decision Makers of ICU Patients (SAPLEN 102)

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Outcomes.

1. Describe the expertise of chaplains on the palliative and ICU teams in caring for patients, families, and staff
2. Describe the effects of the Spiritual Care Assessment and Intervention on the psychosocial distress of family members of ICU patients
3. Evaluate the implications of the study for future research and clinical practice

Importance. Although ICU surrogates experience high distress due to the patient's life-threatening illness, most prior decision making interventions have been unsuccessful in improving surrogate well-being. Additionally, ICU admissions raise concerns about meaning, faith, and spiritual well-being for families that are rarely addressed.

Objective(s). To determine whether an intervention focused directly on the surrogate's spiritual and emotional well-being would improve the surrogate's outcomes.

Method(s). We conducted a single-blinded randomized controlled trial of a spiritual care intervention for ICU surrogates in 5 medical, cardiac, and neurological ICUs of one academic medical center. The Spiritual Care Assessment and Intervention involved 4+ proactive visits by a chaplain by phone or in person, assessment of 4 dimensions of spirituality (meaning/purpose, transcendence/peace, relationships, and self-worth), and individually tailored spiritual care interventions. The intervention was delivered by