Sample Case Poster Abstract Submission

*End of Life Considerations in The Extracorporeal Membrane Oxygenation (ECMO) Patient: A Case Report (C893)*
Jonathan Abraham, MD

**Objectives**
- Understand ECMO basics - its utility, indications, and importance to the palliative care provider.
- Describe unique clinical challenges associated with terminal weans of ECMO in an awake patient.
- Identify potential areas for future research regarding terminal weaning of ECMO.

**Abstract Text**

**Background:** Extracorporeal membrane oxygenation (ECMO) is an emerging life-sustaining intervention for patients experiencing critical cardiopulmonary compromise. Despite the promises of this therapy, studies have shown that over 40% of patients receiving ECMO do not survive their hospitalization. In light of this, existing research and protocols for weaning ECMO in the setting of medical futility is extremely limited. Additionally, research suggests that medications may work differently for patients receiving ECMO, raising questions about the development of future protocols in this patient population.

**Case Description:** Ms. F is a 60 year-old female with a history of pulmonary sarcoidosis who was hospitalized for acute-on-chronic hypoxic respiratory failure, complicated by in-hospital cardiac arrest. She was ultimately resuscitated and placed on VA-ECMO as a bridge to lung transplantation. She maintained intact neurologic function after several weeks during her hospitalization, however she developed a retroperitoneal hemorrhage and was subsequently informed that she was no longer a candidate for transplantation. The patient and her family made the decision to discontinue life sustaining therapies, including ECMO. Prior to ECMO wean, she received boluses of IV morphine and ativan, and a morphine infusion was initiated. Her ECMO was weaned to 50% settings, and then discontinued altogether as medications were titrated. Despite this, the patient was noted to have evidence of respiratory distress including accessory muscle use. She died approximately 20 minutes after discontinuation of ECMO.

**Conclusion:** ECMO is an emerging life-sustaining therapy for some of the most critically ill patients. Despite the high need for palliative care in this patient population, there exists minimal evidence for protocolization of terminal ECMO weans. This presentation will review clinical challenges in delivering palliative care to an awake patient undergoing a terminal ECMO wean, and aims to identify areas of future research, including relief of symptom burden, and minimizing patient/family distress.
Heart Failure Task Force: A Multi-Disciplinary Approach to Treating Patients with Advanced Heart Failure (E122)
Colleen Hazlett-Obrien, DO

Objectives
• Explain the methods used to identify patients for the Heart Failure Task Force.
• Identify the components of our SPC standardized workflow and contribution to the Heart Failure Task Force.
• List three positive patient outcomes of the multi-disciplinary Heart Failure Task Force.

Abstract Text
Background: There are 6 million people in the US with heart failure, costing the nation an estimated $30.7 billion annually. These patients have complex medical demands characterized by high rates of depression, poor quality of life and an increased morbidity and mortality (Rogers et al). The involvement of Supportive and Palliative Care (SPC) in the treatment of patients with heart failure has been shown to improve patient symptoms, pain and quality of life (Mentz et al). We created a multi-disciplinary Heart Failure Task Force (HFTF) to help identify and care for these patients.

Description: HFTF identifies patients based on the probability of being discharged with a heart failure diagnosis and the risk of 30-day readmission. This generates a weekly list that is reviewed by a Heart Failure NP who selects 5-6 patients weekly. Exclusion criteria includes hemodialysis, advanced lung disease and psychosocial variables that would prohibit follow-up in clinic. HFTF multi-disciplinary meetings occur weekly and include Pharmacy, PT/OT, Behavioral Health, SPC, Heart Failure NP/MD, and Social Work. If appropriate, patients were referred to the Heart Failure Bridge Clinic, where patients are followed weekly for four weeks and can see Heart Failure, Behavioral Health and SPC. The SPC team developed a standardized workflow for these inpatient consults, including advanced care planning, providing disease specific education, identifying barriers to care and facilitating continuity through our clinic.

Conclusion: HFTF, a multidisciplinary team approach to treating patients with heart failure, has shown significant improvements in patient care, including a reduction in 30-day readmissions and inpatient mortality rates, as well as healthcare dollars saved.

Results: 156 patients were seen by the HFTF from November 2018 through May 2019. 30-day readmissions decreased from 21.65% to 16.5%. Inpatient mortality decreased from 1.4% to 1.1%. 13% were discharged with hospice. 32% were followed in SPC clinic. Care Standardization savings was $449,251 (goal $375,000 - $450,000).