Symptom Distress, Interventions, and Outcomes of Intensive Care Unit Cancer Patients Referred to a Palliative Care Consult Team

Presented by: Daniela Carli Buttenschoen, February 23rd, 2010

Reference: Marvin O. Delgado-Guay, MD, Henrique A. Parsons, MD, Zhijun Li, MS, Lynn J. Palmer, PhD, and Eduardo Bruera, MD

Abstract
BACKGROUND: The symptom burden of intensive care unit (ICU) patients who are referred to a palliative care team (PCT) has not been characterized to the authors' knowledge, and the response of these symptoms to the palliative care intervention has not been reported.
METHODS: The authors retrospectively reviewed PCT consults for ICU patients who were seen between July 2006 and October 2007. To characterize symptom distress and outcomes in ICU patients who were referred to PCT in a cancer center, information and descriptive statistics about patients' demographics, comorbidities, PCT findings, interventions, and outcomes were obtained. The chi-square test was used to analyze ICU and PCT mortality, and the signed-rank test was used to analyze PCT interventions.
RESULTS: Of 1637 PCT consults, 88 consults (5%) were from the ICU. The median patient age was 60 years (range, 22-87 years), and 41 patients (46%) were women. The types of cancers were hematologic (19 patients; 22%), gastrointestinal (19 patients; 22%), lung (18 patients; 20%), and others (24 patients; 26%). Nineteen patients were on mechanical ventilation (MV), and 24 patients were on bilevel positive airway pressure (BIPAP). The findings were delirium (71 patients; 81%), dyspnea (67 patients; 76%), pain (74 patients; 84%), fatigue (84 patients; 95%), and anxiety (57 patients; 65%). The interventions used were opioid management (99%), steroids (70%), antipsychotics (76%), and counseling (100%), do not resuscitate conversion (62 of 88 patients; 70%), withdrawal of MV (15 of 19 patients; 79%), and withdrawal of BIPAP (26 of 26 patients; 100%). Improvement was reported in pain (67 patients; 90%), dyspnea (60 patients; 90%), anxiety (51 patients; 80%), and delirium (31 patients; 44%). Thirty-five patients (40%) were transferred to the palliative care unit (PCU). Fifty-one ICU/PCT patients (58%) died during admission versus 130 of 1549 (8%) non-ICU PCT patients (P < .0001). Twenty-three of 35 patients who were transferred to the PCU (66%) died there versus 212 of 629 patients (34%) who were admitted to the PCU from another service (P <0.0001). Thirty-seven of 88 ICU/PCT patients (42%) were discharged alive. CONCLUSIONS: ICU patients who are referred to the PCT have severe symptom distress. The PCT was able to identify multiple problems and make numerous pharmacologic and nonpharmacologic recommendations that improved these symptoms, including the participation in do not resuscitate conversion and withdrawal of MV and BIPAP. Although many patients in this population died, a significant subset, including those who were transferred to the PCU, survived to discharge.
**Strength**
abundant data, well analyzed, appropriate assessment tools

**Weakness**
Organizational structure in the authors' hospital might be very different from the usual settings and it is questionable whether the results are transferable to other places. Many ICU patients were not able to complete the ESAS. Evaluation of caregivers' distress was not included in this study.

**Relevance to palliative care**
The article shows how patients in ICU could profit from the involvement of a palliative care team in their care. ICU patients are in severe physical and emotional distress irrespective of their underlying disease. The role of a palliative consult team on ICU units could include counseling of patients and their families regarding DNR status and end-of-life decision making, and provide psychological and spiritual support of caregivers and patients. Furthermore, they could be involved in goal of care decisions and symptom control after withdrawal of aggressive treatment.