



## Optimal Pain Management in Advanced Illness Opioid Use Has No Negative Effect on Survival

The *Journal of the American Medical Directors Association* recently published a study examining the effects of opioid use on survival in a hospice setting. It has been suggested that under-treatment of pain is common among patients with advanced illness,<sup>1</sup> and that clinician concerns about adverse drug effects contribute to restricted use of opioids.<sup>2,8</sup> Because optimal symptom management is a major goal of hospice care, the effects of commonly used opioids are of primary concern. Pain due to advanced illness can usually be managed with an opioid regimen. However, throughout the 90s and early in the previous decade, multiple authors reasoned that opioid toxicity would hasten the death of patients with advanced illness.<sup>3-7</sup> As little to no science was available on the subject at the time, this reasoning was based on educated guesses. The work of Daniel Azoulay, MD and colleagues published this year adds to the body of evidence demonstrating that the levels of opioid usage needed for optimal analgesic effect does not bear a negative impact on the survival of patients with advanced illness.<sup>2,8-10</sup>

Dr. Azoulay and colleagues performed a retrospective observational study on 114 consecutive hospice patients who had cancer. Using Cox proportional hazard models,



they established that the following aspects of opioid usage had no significant association with mortality: dose on admission (HR 1.009), dose at death (HR 1.004), mean dose (HR 1.006), overall dose increase (HR 0.733), overall dose decrease (HR 0.967), day-by-day dosage changes (HR 1.005). Interestingly, increasing overall opioid dosage was associated with a 50% greater survival in days compared to no change in dosage and decreasing dosage (14 mean survival days versus 9.3 days and 9.1 days respectively). The observed correlation between improved pain control and improved survival complements a growing body of literature supporting the concept that hospice, attention to symptom control, and emotional support has a positive survival effect.<sup>11-15</sup>

The goal of hospice is neither to shorten nor prolong life. Hospice works to maximize quality of life. Some patients have trouble electing hospice at the right time, because they fear that choosing hospice means giving up hope. Instead, hospice means embracing the hope for maximum quality of life during a very important time. A life lengthened by days to months appears to be a common consequence of the improved quality of life.



## More than 20 Years of Hospice Experience to Support Patient Satisfaction

Baystate Visiting Nurse Association & Hospice (BVNAH) has been providing hospice care for more than 20 years. Our medical director is a geriatrician certified in Hospice & Palliative Care, and several of our hospice nurses and hospice aides have earned certification from the National Hospice & Palliative Care Organization. BVNAH hospice nurses also receive continual training on pain control. According to PRC surveys, BVNAH Hospice patient satisfaction for staff's helpfulness in reducing or eliminating pain was above the 90th percentile through April 2011. BVNAH's experience helps support patient quality of life to the end.

**Call BVNAH to help with important conversations about end-of-life care.**  
A hospice nurse or social worker will meet your patients at your office, at the hospital, or in their home.

## References

1. Teno J, Clarridge B, Casey V, et al. Family perspectives on end-of-life care at the last place of care. *JAMA* 2004; 291 (1): 88-93.
2. Portney R, Sibirceba B, Smout R, et al. Opioid use and survival at the end of life: a survey of a hospice population. *Journal of Pain and Symptom Management*. 2006; 32 (6): 532-540.
3. Wilson W, Smedira N, Fink C, et al. Ordering and administration of sedatives and analgesics during the withholding and withdrawal of life support from critically ill patients. *JAMA* 1992; 267: 949-953.
4. Cavanaugh T. The ethics of death-hastening or death-causing palliative analgesic administration to the terminally ill. *J Pain Symptom Manage*. 1996; 12: 248-254.
5. Cantor N, Thomas G. Pain relief, acceleration of death, and criminal law. *Kennedy Inst Ethics J*. 1996; 6: 107-127.
6. Krakauer E, Penson R, Truog R, et al. Sedation for intractable distress of a dying patient: acute palliative care and the principle of double effect. *Oncologist*. 2000; 5 (1): 53-62.
7. Kaldjian L, Jekel J, Bernene J, et al. Internists' attitudes towards terminal sedation in end of life care. *J Med Ethics* 2004; 30 (5): 499-503.
8. Azoulay D, Jacobs J, Cialic R, et al. Opioids, survival, and advanced cancer in the hospice setting. *Journal of the American Medical Directors Association*. 2011; 12 (2): 129-34.
9. Bercovitch M, Adunsky A. Patterns of high-dose morphine use in a home-care hospice service: should we be afraid of it? *Cancer* 2004; 101: 1473-1477.
10. Bercovitch M, Waller A, Adunsky A. High dose morphine use in the hospice setting. A database survey of patient characteristics and effect on life expectancy. *Cancer* 1999; 86: 871-877.
11. Connor S, Pyenson B, Fitch K, et al. Comparing hospice and nonhospice patient survival among patients who die within a three-year window. *J Pain Symptom manage*. 2007 Mar; 33(3): 238-46.
12. Christakis N, Iwashyna T, Zhang J. care after the onset of serious illness: a novel claims-based dataset exploiting substantial cross-set linkages to study end-of-life care. *J Palliat Med* 2002; 5: 515-529.
13. Christakis N, Predicting patient survival before and after hospice enrollment. *Hosp J* 1998; 13: 71-87.
14. Connor S. *Hospice: Practice, pitfalls, and promise*. Philadelphia, PA: Taylor and Francis, 1998. 118-119.
15. Forster L, Lynn J. the use of physiologic measures and demographic variables to predict longevity among inpatient hospice applicants. *Am J Hosp Care* 1989; 6: 31-34.