Guest Editorial

Delirium and Dying

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A parted ev'n just between twelve and one, ev'n at the turning o' th' tide- for after I saw him fumble with the sheets, and play with flowers, and smile upon his finger ends, I knew there was but one way; for his nose was as sharp as a pen, and 'a babbled of green fields... A bade me lay more clothes on his feet. I put my hand onto the bed and felt them, and they were cold as any stone.

William Shakespeare, Henry V

There is a terrible poignancy to the delirium experienced by a person who is dying. For those who love that person, and likely for the dying individuals themselves, there can be a sense of opportunity lost, of having left too soon. This is not an isolated phenomenon: Case series show that many, even most, patients who die of advanced cancer experience delirium (Gagnon et al., 2000; Jenkins et al., 2000; Lawlor et al., 2000; Massie et al., 1983; Pereira et al., 1997; Power et al., 1993). In this observation lie conceptual and practical problems. Conceptually, it is not clear how those whose chief focus is the advancement of research and practice on delirium should view decreased attention and concentration and arousal (and from this, impairment in higher aspects of cognition) in a person who is dying. If this is largely an inevitable and untreatable aspect of the last several hours of the lives of terminally ill patients, should it be conceptualized differently from the onset of these symptoms over a few hours in a person who has otherwise been well? Or should these situations be seen as being at opposite poles of an approach to the management of a condition that is nevertheless a unified entity? There is currently no phenomenological or pathophysiological evidence that might help us on this issue. Might the best analogy here be to view delirium as if it were, say, a myocardial infarction? "Heart attack" has continuity as a concept despite diverse instantiation, and we readily accept that the diverse circumstances result in diverse management. Even if we accept the assumptions inherent in the inevitability and naturalness of delirium as part of the dying process, how are we to count it? Where does delirium in a terminally ill patient count in the statistics reckoning the prevalence and incidence of delirium, or more importantly in the impact of delirium on survival? Have some of the accounts of the poor prognosis of delirium overstated its impact by not taking into account delirium among the dying?

Delirium among the terminally ill is also of interest, of course, to those whose focus is the advancement of research and practice in the care of the dying. While recognizing that delirium can sometimes be a relatively brief and natural part of the dying process, it is difficult to read a recent Consensus Panel statement of end-of-life care without feeling some of the poignancy of the cases that must have motivated this effort. The statement, by a panel of the American College of Physicians and the American Society of Internal Medicine, challenges health care providers to face head-on some of the practical dilemmas potentially reversible of delirium among patients who are nevertheless terminally ill (Casaret & Inouye, 2001). Usefully, these dilemmas are dealt with by working through a difficult but exemplary case. Patients' and families' goals are rightly accorded center stage, exhaustive laboratory and imaging studies are not undertaken, and scrupulous attention is paid to medications and to the patient's environment. A role for family members in diagnosis and management, though not spelled out, is at least envisioned.

But to return to our original focus on delirium—what are we to make of this as delirium researchers? Perhaps an analogy is useful here. Patients with dementia often demonstrate behavioral and psychological symptoms that are akin, for example, to depression or to anxiety but which nevertheless fall short of meeting relevant diagnostic criteria. In such cases, it is useful to think of these diagnoses as metaphors for how the behaviors and symptoms have occurred and how they might be treated (Tariot, 1999). Similarly, among those patients with known terminal illness, the metaphor of delirium might be employed as an aid to diagnosis and to management, while keeping it distinct from the delirium encountered among those not recognized at the outset as terminally ill.

What are the consequences of understanding delirium as a metaphor for what is sometimes called the "terminal drop" among those who are dying? For those caring for the dying, it allows insights into the potential for reversal of the delirious symptoms, insights which, with judicious application, can help relieve suffering. For those whose interest is delirium, there is a need to estimate the impact of unrecognized "terminal drop" on our understanding of the outcomes of delirium. We need to separate from the notion of delirium the idea of terminal decline as an event heralding death, which requires not the application of delirium diagnostic schedules but the thoughtful institution of palliative care (Bruera et al., 1992). Perhaps some part of the persisting difficulty in communicating delirium management techniques to practicing clinicians (Rockwood, 1999) has been our failure to disentangle this aspect of delirium, as heralding the final act in the play of death, from the delirium as the villain to be vanquished.

The distinction, of course, can be tricky, and it is easy to think of cases for example, of a depressed patient with lymphoma who poisons himself with methanol but presents with delirium that blur distinctions of "terminal illness," incidental delirium, and disease presentation. But let us not be dissuaded by this. Delirium is a truly clinical research phenomenon, and as such requires systematic clinical observation of large numbers of patients. Such study will unravel many unique threads in the rich tapestry of altered cognition in the face of illness, and we must allow these to be properly described, and not precluded by premature specification of models of disease.

Such a study will also highlight areas in which the interest of palliative care researchers and delirium researchers coincides. The role of analgesia in causing delirium, or, by combating deliriogenic pain, in relieving it; the question of whether delirious patients who are dying can competently change their wills during apparently lucid periods; the limitations that cognitive impairment, including delirium, has on the perception, recognition, or management of pain; or how to think of dementia as a terminal illness when making decisions about superimposed acute illness (Morrison & Siu, 2000): these are all important clinical questions that are likely to need the combined expertise of researchers from both backgrounds. Questions like these, by dwarfing our current abilities, can unite us in our enquiries.

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REFERENCES

Bruera, E., Miller, L., McCallion, J., Macmillan, K., Krefting, L., et al. (1992). Cognitive failure in patients with terminal cancer: A prospective study. *Journal of Pain Symptom Management*, 7, 192-195.

- Casaret, D. J., & Inouye, S. K. (2001). Diagnosis and management of delirium near the end of life. *Annals of Internal Medicine*, *135*, 332-340.
- Gagnon, P., Allard, P., Masse, B., & DeSerres, M. (2000). Delirium in terminal cancer: A prospective study using daily screening, early diagnosis, and continuous monitoring. *Journal of Pain Symptom Manager, 19*, 412-426.
- Jenkins, C. A., Schultz, M., Hanson, J., & Bruera, E. (2000). Demographic, symptom, and medication profiles of cancer patients seen by a palliative care consult team in a tertiary referral hospital. *Journal of Pain Symptom Manager, 19,* 174-184.
- Lawlor, P. G., Mekolaichuk, C., Gagnon, B., Mancini, I. L., Pereira, J. L., et al. (2000). Clinical utility, factor analysis, and further validation of the memorial delirium assessment scale in patients with advanced cancer: Assessing delirium in advanced cancer. *Cancer, 88,* 2859-2867.
- Massie, M. J., Holland, J., & Gloss, E. (1983). Delirium in terminally ill cancer patients. *American Journal of Psychiatry, 140,* 1048-1050.
- Morrison, R. S., & Siu, A. L. (2000). Survival in end-stage dementia following acute illness. *Journal of the American Medical Association, 284, 47-52.*
- Pereira, J., Hanson, J., & Bruera, E. (1997). The frequency and clinical course of cognitive impairment in patients with terminal cancer. *Cancer, 79,* 835-845.
- Power, D., Kelly, S., Glisenan, J., Kearney, M., O'Mahony, D., et al. (1993). Suitable screening tests for cognitive impairment and depression in the terminally ill—A prospective prevalence study. *Palliative Medicine*, *7*, 213-218.
- Rockwood, K. (1999). Educational intervention in delirium. *Dementia and Geriatric Cognitive Disorders, 10,* 426-429.
- Tariot, P. N. (1999). Treatment of agitation and dementia. *Journal of Clinical Psychiatry*, 60(Suppl. 8), 11-20.

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