EDITORIAL

RUDI G.J. WESTENDORP, MD, PhD
Professor of Medicine at Old Age, Department of Public Health and Center for Healthy Aging, University of Copenhagen, Denmark

Bedside manners: How to deal with delirium

During my training in Leiden, Netherlands, I was infused with the lessons of Herman Boerhaave (1668–1738), the professor who is considered the pioneer of bedside teaching.[1] This practice had begun in Padua and was then brought to Leiden, where Boerhaave transformed it into an art form. At the Caecilia hospital, the municipal clerics provided Boerhaave with 2 wards for teaching; 1 with 6 beds for men and the other with 6 beds for women. Medical historian Henry Sigerist[2] has commented that half the physicians of Europe were trained on these 12 beds.

See related article, page 690

Boerhaave made daily rounds with his students, examining the patients, reviewing their histories, and inspecting their urine. He considered postmortem examinations essential and made his students attend the autopsies of patients who died: "In spite of the most detailed description of all disease phenomena one does not know anything of the cause until one has opened the body."[2]

What was once the basis of clinical medicine is now fading, with both clinical rounds and autopsies being replaced by imaging techniques of body parts and automated analysis of Vacutainer samples. These novelties provide us with far more diagnostic accuracy than Boerhaave had, and randomized controlled trials provide us with an evidence base. But bedside observation and case reports are still relevant,[3] and autopsies still reveal important, clinically missed diagnoses.[4]

In this issue of the *Journal*, Imm et al[5] describe a case of presumed postoperative delirium in a 64-year-old hospitalized patient. They remind us that crucial signs and symptoms can guide how to use our modern diagnostic tools.

doi:10.3949/ccjm.84a.17066

DELIRIUM IS OFTEN OVERLOOKED

Delirium is often overlooked by physicians. But why? The characteristic disturbances in attention and cognition are easy to interpret, while the various observation scales have high sensitivity and should signal the need for further interrogation. Perhaps the reason we often overlook the signs and symptoms is that we assume that delirium is just normal sickness behavior.

Another reason we may fail to recognize the syndrome is more fundamental and closely related to how we practice medicine. These days, we place such trust in high-tech diagnostics that we feel the modern procedures supersede the classic examination of patients. But mental disturbances can only be detected by history-taking and clinical observation.

In spite of modern technology, clinical observation remains important

Moreover, the actual mental state is less important than the subtle changes in it. A continuously disturbed mind does not pose a problem, but a casual remark by a family member or informal caregiver that "his mood has changed" should seize our attention.[6]

Here, the fragmented and disconnected practice of modern medicine takes its toll. Shorter working hours have helped to preserve our own mental performance, but at the cost of being less able to follow the patient's mental status over time and to recognize a change of behavior. Applying repeated, standardized assessments of these vital signs may help solve the problem, but repeated observations are easily neglected, as are body temperature, blood pressure, and others.

DELIRIUM IS SERIOUS

Imm et al also remind us that delirium is serious. The case-fatality rate in delirium equals that in acute cardiovascular events or metastatic cancer, even though its impact is often not thought to be as severe. Far too often the mental symptoms are dismissed and judged to be something to be handled in the outpatient clinic after the acute problems are addressed.

In part, this may be because no professional society or advocacy group is promoting the recognition, diagnosis, and treatment of delirium or pushing for incentives to do so. We have cardiologists and oncologists but not deliriologists. But in a way, it may be a good thing that no specialist group "owns" delirium, as the syndrome is elicited by various underlying disease mechanisms, and every physician should be vigilant to recognize it.

DELIRIUM REQUIRES PROMPT MANAGEMENT

If delirium is a life-threatening condition, it necessitates a prompt and coordinated series of diagnostic actions, judgments, and decisions.[7] Although most delirious patients are not admitted to an intensive care unit, they should be considered critically ill and must be provided a corresponding level of care. Here, the old clinical aphorism holds: action should be taken before the sun sets or rises. Attention should be on worsening of the underlying disease, unexpected comorbid conditions, and side effects of our interventions.

As the case reported by Imm et al shows, the causative factors may be recognized only after in-depth examination.[4] The pathogenesis of delirium is poorly understood, and there is no specific therapy for it. There is not even conclusive evidence that the standard use of antipsychotics is beneficial, whereas their side effects cannot be overestimated.[7] Our interventions are aimed at eliminating the underlying pathologies that have triggered the delirious state, as well as on preventing complications of the mental disturbance.

Many of us have had the experience of watching one of our children develop fever and confusion. When our older patients become delirious, it should raise the same level of alarm and activity as when it happens in a child.

REFERENCES

1. **Koehler U, Hildebrandt O, Koehler J, Nell C**. The pioneer of bedside teaching—Herman Boerhaave (1668–1738). Dtsch Med Wochenschr 2014; 139:2655–2659.
2. **Sigerist HE**. A History of Medicine. New York: Oxford University Press 1951;1. [According to Walker HK. Chapter 1. The origins of the history and physical examination. In: Walker HK, Hall WD, Hurst JW, editors. Clinical Methods: The History, Physical, and Laboratory Examinations. 3rd ed. Boston: Buterworths, 1990.] www.ncbi.nlm.nih.gov/books/NBK458/. Accessed August 7, 2017.
3. **Vandenbroucke JP**. In defense of case reports and case series. Ann Intern Med 2001; 134:330–334.
4. **Shojania KG, Burton EC, McDonald KM, Goldman M**. Changes in rates of autopsy-detected diagnostic errors over time: a systematic review. JAMA 2003; 289:2849–2856.
5. **Imm M, Torres LF, Kottapally M**. Postoperative delirium in a 64-year-old woman. Cleve Clinic J Med 2017; 84:690–698.
6. **Steis MR, Evans L, Hirschman KB, et al**. Screening for delirium using family caregivers: convergent validity of the family confusion assessment method and interviewer-rated confusion assessment method. J Am Geriatr Soc 2012; 60:2121–2126.
7. **Inouye SK, Westendorp RGJ, Saczynski JS**. Delirium in elderly people Lancet 2014; 383:911–922.

***ADDRESS**: Rudi GJ Westendorp, MD, PhD, Department of Public Health and Center for Healthy Aging, University of Copenhagen, Oster Farimagsgade 5, PO Box 2099, DK-1014 Copenhagen K, Denmark; westendorp@sund.ku.dk*