



# Dehydration in terminal illness: Which path forward?

While our natural tendency is to restore full hydration to patients, how do we proceed when death is imminent and being fully hydrated may prolong discomfort?

## CASE 1

A 94-year-old white woman, who had been in excellent health (other than pernicious anemia, treated with monthly cyanocobalamin injections), suddenly developed gastrointestinal distress 2 weeks earlier. A work-up performed by her physician revealed advanced pancreatic cancer.

Over the next 2 weeks, she experienced pain and nausea. A left-sided fistula developed externally at her flank that drained feces and induced considerable discomfort. An indwelling drain was placed, which provided some relief, but the patient's dyspepsia, pain, and nausea escalated.

One month into her disease course, an oncologist reported on her potential treatment options and prognosis. Her life expectancy was about 3 months without treatment. This could be extended by 1 to 2 months with extensive surgical and chemotherapeutic interventions, but would further diminish her quality of life. The patient declined further treatment.

Her clinical status declined, and her quality of life significantly deteriorated. At 3 months, she felt life had lost meaning and was not worth living. She began asking for a morphine overdose, stating a desire to end her life.

After several discussions with the oncologist, one of the patient's adult children suggested that her mother stop eating and drinking in order to diminish discomfort and hasten her demise. This plan was adopted, and the patient declined food and drank only enough to swish for oral comfort. At 4 months, she reported less physical discomfort and an improved mood. She died otherwise uneventfully 2 weeks later.

## CASE 2

An 83-year-old woman with advanced Parkinson's disease had become increasingly disabled. Her gait and motor skills were dramatically and progressively compromised. Pharmacotherapy yielded only transient improvement and considerable adverse effects of choreiform hyperkinesia and hallucinations, which were troublesome and embarrassing. Her social, physical, and personal well-being declined to the point that she was placed in a nursing home.

Despite this help, worsening parkinsonism progressively diminished her physical capacity. She became largely bedridden and developed decubitus ulcerations, especially at the coccyx, which produced severe pain and distress.

The confluence of pain, bedfastness, constipation, and social isolation yielded a loss of interest and joy in life. The patient required assistance with almost every aspect of daily life, including eating. As the illness progressed, she prayed at night that God would "take her." Each morning, she spoke of disappointment upon reawakening. She overtly expressed her lack of desire to live to her family. Medical interventions were increasingly ineffective.

After repeated family and physician discussions had focused on her death wishes, one adult daughter recommended her mother

### Kanwarjeet Brar, MD; Hema Madhuri Mekala, MD; Steven Lippmann, MD

Psychiatry Residency Program Texas Tech University, Odessa (Dr. Brar); Psychiatry Residency Training Program Griffin Memorial Hospital, Norman, Okla (Dr. Mekala); Department of Psychiatry University of Louisville, School of Medicine, Ky (Dr. Lippmann)

sblipp01@louisville.edu

The authors reported no potential conflict of interest relevant to this article.



stop eating and drinking; her food intake was already minimal. Although she did not endorse this plan verbally, the patient's oral intake significantly diminished. Within 2 weeks, her physical state had declined, and she died one night during sleep.

dequate hydration is stressed in physician education and practice. A conventional expectation to normalize fluid balance is important to restore health and improve well-being. In addition to being good medical practice, it can also show patients (and their families) that we care about their well-being.<sup>1-3</sup>

Treating dehydration in individuals with terminal illness is controversial from both medical and ethical standpoints. While the natural tendency of physicians is to restore full hydration to their patients, in select cases of imminent death, being fully hydrated may prolong discomfort. Emphasis in this population should be consistently placed on improving comfort care and quality of life, rather than prolonging life or delaying death. 5-5

# A multifactorial, patient-based decision

Years ago, before the advent of hospitalizing people with terminal illnesses, dying at home amongst loved ones was believed to be peaceful. Nevertheless, questions arise about the practical vs ethical approach to caring for patients with terminal illness.2 Sometimes it is difficult to find a balance between potential health care benefits and the burdens induced by medical, legal, moral, and/or social pressures. Our medical communities and the general population uphold preserving dignity at the end of life, which is supported by organizations such as Compassion & Choices (a nonprofit group that seeks to improve and expand options for end of life care; https:// www.compassionandchoices.org).

Allowing for voluntary, patient-determined dehydration in those with terminal illness can offer greater comfort than maintaining the physiologic degrees of fluid balance. There are 3 key considerations to bear in mind:

 Hydration is usually a standard part of quality medical care.<sup>1</sup>

- Selectively allowing dehydration in patients who are dying can facilitate comfort.<sup>1-5</sup>
- Dehydration may be a deliberate strategy to hasten death.<sup>6</sup>

## When is dehydration appropriate?

Hydration is not favored whenever doing so may increase discomfort and prolong pain without meaningful life.<sup>3</sup> In people with terminal illness, hydration may reduce quality of life.<sup>7</sup>

■ The data support dehydration in certain patients. A randomized controlled trial involving 129 patients receiving hospice care compared parenteral hydration with placebo, documenting that rehydration did not improve symptoms or quality of life; there was no significant difference between patients who were hydrated and those who were dehydrated. In fact, dehydration may even yield greater patient comfort. B

Case reports, retrospective chart reviews, and testimonials from health care professionals have reported that being less hydrated can diminish nausea, vomiting, diarrhea, ascites, edema, and urinary or bowel incontinence, with less skin breakdown.<sup>8</sup> Hydration, on the other hand, may exacerbate dyspnea, coughing, and choking, increasing the need for suctioning.

■ A component of palliative care. When death is imminent, palliation becomes key. Pain may be more manageable with less fluids, an important goal for this population. Dehydration is associated with an accumulation of opioids throughout body fluid volumes, which may decrease pain, consciousness, and/or agony. Pharmacotherapies might also have greater efficacy in a dehydrated patient. In addition, tissue shrinkage might mitigate pain from tumors, especially those in confined spaces.

Hospice care and palliative medicine confirm that routine hydration is not always advisable; allowing for dehydration is a conventional practice, especially in older adults with terminal illness.<sup>7</sup> However, do not deny access to liquids if a patient wants them, and never force unwanted fluids by any route.<sup>8</sup> Facilitate oral care in the form of swishing fluids, elective drinking, or providing mouth

Do r

Do not deny access to liquids if a patient wants them, and never force unwanted fluids by any route. lubrication for any patients selectively allowed to become dehydrated.<sup>3,8</sup>

# The role of the physician in decision-making

Patients with terminal illness sometimes do not want fluids and may actively decline food and drink. This can be emotionally distressing for family members and/or caregivers to witness. Physicians can address this concern by compassionately explaining: I know you are concerned that your relative is not eating or drinking, but there is no indication that hydration or parenteral feeding will improve function or quality of life. This can generate a discussion between physicians and families by acknowledging concerns, relieving distress, and leading to what is ultimately best for the patient.

# Implications for practice: Individualized autonomy

Physicians must identify patients who wish to die by purposely becoming dehydrated and uphold the important physician obligation to hydrate those with a recoverable illness. Allowing for a moderate degree of dehydration might provide greater comfort in select people with terminal illness. Some individuals for whom life has lost meaning may choose dehydration as a means to hasten their departure. Allowing individualized autonomy over life and death choices is part of a physician's obligation to their patients. It can be difficult for caregivers, but it is medically in-

dicated to comply with a patient's desire for comfort when death is imminent.

Providing palliation as a priority over treatment is sometimes challenging, but comfort care takes preference and is always coordinated with the person's own wishes. Facilitating dehydration removes assisted-suicide issues or requests and thus affords everyone involved more emotional comfort. An advantage of this method is that a decisional patient maintains full control over the direction of their choices and helps preserve dignity during the end of life.

#### CORRESPONDENCE

Steven Lippmann, MD, Department of Psychiatry, University of Louisville School of Medicine, 401 East Chestnut Street, Suite 610, Louisville, KY 40202; sblipp01@louisville.edu

#### References

- Burge FI. Dehydration and provision of fluids in palliative care. What is the evidence? Can Fam Physician. 1996;42:2383-2388.
- Printz LA. Is withholding hydration a valid comfort measure in the terminally ill? Geriatrics. 1988;43:84-88.
- Lippmann S. Palliative dehydration. Prim Care Companion CNS Disord. 2015;17: doi: 10.4088/PCC.15101797.
- Bernat JL, Gert B, Mogielnicki RP. Patient refusal of hydration and nutrition: an alternative to physician-assisted suicide or voluntary active euthanasia. Arch Intern Med. 1993;153:2723-2728.
- Sullivan RJ. Accepting death without artificial nutrition or hydration. J Gen Intern Med. 1993;8:220-224.
- Miller FG, Meier DE. Voluntary death: a comparison of terminal dehydration and physician-assisted suicide. Ann Intern Med. 1998;128:559-562.
- Bruera E, Hui D, Dalal S, et al. Parenteral hydration in patients with advanced cancer: a multicenter, double-blind, placebocontrolled randomized trial. I Clin Oncol. 2013;31:111-118.
- Forrow L, Smith HS. Pain management in end of life: palliative care. In: Warfield CA, Bajwa ZH, ed. *Principles and Practice of Pain Management*. 2nd ed. New York. NY: McGraw-Hill: 2004.
- 9. Zerwekh JV. The dehydration question. Nursing. 1983;13:47-51.
- Bailey F, Harman S. Palliative care: The last hours and days of life. www.uptodate.com. September, 2016. Accessed on September 11, 2018

>

Allowing individualized autonomy over life and death choices is part of a physician's obligation to their patients.