

Artificial Hydration at End-of-Life



Few decisions are as difficult for patients and their families as those surrounding the provision of artificial hydration in the final phases of the patient's life. Artificial hydration is the provision of water or electrolyte solutions by any non-oral route (intravenous, enterally). While the oral route for providing hydration should be encouraged as long as the patient is willing and able, loss of the ability to take in adequate hydration via the oral route should lead to discussions regarding the use of artificial hydration. The decision whether or not to provide artificial hydration often evokes a powerful emotional response. Patients, their families, and even many practitioners are not always aware of the implications of providing artificial hydration.

The Data:

Artificial hydration requires careful site selection, placement, and management. Potential risks include pain, clot formation, local irritation, infiltration, and infections. Depending on the site, mobility may be limited as well.¹

- Artificial hydration can lead to fluid overload thereby worsening distressing dyspnea, edema, or ascites.³
- Parenteral fluids may prolong the dying process by causing fluid overload resulting in edema, ascites and/or dyspnea.^{1,3}
- Dehydration can lead to pre-renal azotemia and side effects from drug metabolite accumulation. In this situation, artificial hydration may reduce these symptoms and promote the patient's comfort.³
- Typically, dying patients do not complain of thirst. However, dry mouth is extremely common and is easily addressed with ice chips, moist sponges, lip moisturizers, and effective and frequent mouth care.² Artificial hydration does not seem to improve the symptom of dry mouth
- Because dying patients not receiving hydration have less need to void the need for the use of a bedpan, diaper changes, or placement of a foley catheter is decreased thereby improving overall patient comfort.,
- Dying patients not receiving hydration also have a decrease in gastrointestinal fluid and, as a result, they may have less nausea, vomiting, and diarrhea.³
- Dehydration may actually provide a "natural" anesthetic to ease the dying process.³
- As the dying process progresses and the level of consciousness decreases, the patient loses the ability to swallow and oral secretions may pool in the oropharynx and bronchi. Air moving over these pooled secretions produces the coarse sound commonly referred to as the "death rattle". A decrease in fluid intake is a frequently used and non-pharmacological strategy for prophylaxis and treatment of this distressing sign of imminent death.⁴

Ethical/Legal Issues:

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- A 1997 US Supreme Court decision unequivocally supported the patient's right to refuse any treatment, including those that may be life-prolonging, on the basis of the right to bodily integrity.⁵
- Artificial hydration is a medical therapy, not a basic intervention, and is administered for a medical indication. Therefore, there is no legal or ethical obligation to provide the intervention unless the benefits outweigh the risks/burdens.³
- In the absence of an advance care directive, the surrogate's decisions regarding artificial hydration should be based on the patient's previous statements or on the surrogate's knowledge of the patient, commonly known as substituted judgment. Otherwise, the surrogate's decisions should be guided by considering the patient's best interest.⁶

Recommended Actions:

- Practitioners should emphasize that, like all medical interventions, the administration of artificial hydration is associated with the possibility of increased discomfort and risks.
- When in doubt, a time-limited trial with the clearly stated goal of improving patient comfort may be an appropriate recommendation to establish whether or not the patient will benefit from artificial hydration.³
- Prior to withholding or withdrawing of artificial hydration with a decisionally incapable patient, it is the physician's ethical responsibility to determine whether an advance directive has been executed and whose provisions may have specifically addressed hydration. Otherwise, the practitioner must discuss the benefits and burdens of long-term artificial hydration with the surrogate decision maker.
- Most experts feel that dehydration in the last hours of living does not cause distress and may stimulate endorphin release that promotes the patient's sense of well-being.^{7,8,9,10}
- The practitioner should relate decisions about the benefits and burdens of artificial hydration to medically achievable goals of care with documentation in the medical record.
- For example: hydration will not improve prognosis or alter the course of the underlying illness. Hydration is likely to produce discomfort and is therefore not medically indicated.
- Practitioners should ensure patients and families that any discomforts associated with the withholding or withdrawing hydration can be managed effectively.
- Practitioners should acknowledge the powerful emotional response that the decision to withdraw or withhold artificial hydration may elicit in the patient's family and even in the members of the health care team.
- Consultation with hospice or palliative medicine specialists may be helpful in establishing goals of care as well as managing patient symptoms.

References:

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