

FEEDING TUBES: SORTING OUT THE ISSUES

Efficacy of Artificial Nutrition and Hydration Is Determined by Several Clinical Factors

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The use of feeding tubes, especially in long-term care settings, is a touchy issue in Catholic health care. Decisions about feeding tube use can be difficult for a variety of reasons: complicated clinical situations, strong emotions surrounding these decisions on the part of families and caregivers, and conflicting perceptions of church teaching. Given these circumstances, not all will agree about the use of feeding tubes. But we can achieve much more clarity surrounding the issue than is currently the case.

Better decision making about the use of feeding tubes for artificial nutrition and hydration can be achieved by three interlocking actions:

- Considering the right paradigm for decision making
- Carefully evaluating the clinical details of the case in light of current knowledge
- Understanding church teachings

THE RIGHT PARADIGM

What does "considering the right paradigm" mean? Far too frequently, we allow conflicts and controversies about the use of artificial nutrition and hydration in the setting of persistent vegetative state (PVS) to influence our care decisions in other, unrelated conditions. Decisions about artificial nutrition and hydration in PVS are extremely difficult to make; good people with good intentions may disagree. But the issues in PVS are not necessarily the same when one is addressing other medical conditions. PVS usually involves a young person in a tragic situation. It is ethically unsound to allow such a relatively rare condition to influence judgments and actions in the far more common cases of seriously ill patients, who are usually advanced in years and for whom the prognosis *with or without* a feeding tube is not good. The current tendency to allow PVS issues

to prevail in feeding tube discussions is a bit like using conjoined twins as the paradigm for obstetrics. Both conditions are rare and tragic, and their management is morally and medically controversial. Extreme cases provide little insight into common ones.

Both the medical and ethical issues involved in the vast majority of cases in which the patient has a swallowing disorder, decreased consciousness, or some other reason for not being able to orally receive an adequate amount of food and water are often quite different than for cases of PVS. Regrettably, some of the recriminations around feeding tube removal in cases of PVS have polarized questions of feeding tube placement in cases that have very different prognoses. This confusion sometimes leads patients, family members, and health care professionals to take a moral stand without thinking carefully enough about the clinical details. Basing judgments on incomplete data is bad medicine, and even worse ethics.

CLINICAL ISSUES OF FEEDING TUBE USE

Both the decision to use a feeding tube and the care of a patient with such a feeding tube requires sophisticated medical knowledge, clinical skill, and ongoing medical attention. The use of feeding tubes requires clinicians to take four necessary actions:

- Weighing the indications and contraindications for feeding tube placement
- Choosing from several types of feeding tubes and selecting a method of placement
- Considering what actually occurs when a feeding tube is placed (because the tube is only the vehicle by which nutrients and fluids are administered, the details of the feeding are critical for success)
- Realistically understanding potential complications, both catastrophic and minor

For some, this review of the key clinical considerations in the use of feeding tubes and medically assisted nutrition and hydration may be more than they really want to know. But rudimentary knowledge of some of the medical issues at stake is essential for any sort of reasoned ethical approach. One cannot make ethical decisions in clinical situations without an appreciation of medical reality.

Indications and Contraindications Feeding tubes are used when the patient has difficulty in swallowing, diminished consciousness, or a need to supplement inadequate oral intake when, for a variety of reasons, he or she cannot eat or drink enough material to maintain health or sustain life. Feeding tubes may be indicated when an individual has had a head injury, is in a coma, or has some other type of neurologic condition, such as a stroke or brain tumor, that prevents swallowing. Feeding tubes may also be used to bypass an obstruction in the esophagus or pharynx. In a severe illness, a feeding tube may allow adequate nutrition to be given to a person who is otherwise too debilitated to eat. In dementing illnesses, feeding tubes are sometimes used when individuals seem unable to remember how to eat or drink and therefore no longer swallow, even when food is placed in their mouths.

Feeding tubes are also used to prevent aspiration in a variety of conditions. Aspiration occurs when food, gastric contents, or oral secretions enter the lungs. Aspiration commonly results in pneumonia. For example, a person who has had a stroke but is otherwise awake and alert may have difficulty in swallowing; as a result, food or liquids go into the lungs rather than the esophagus and stomach. Feeding tubes do not prevent all aspiration into the lungs. Chronically ill, debilitated individuals with feeding tubes frequently have bouts of aspiration pneumonia even if they are not given any food or liquid by mouth. All individuals have some regurgitation of material from the stomach that heads toward the lungs via the esophagus. Saliva and other material from the pharynx can potentially end up in the lungs. In healthy individuals this occurrence is minor, and

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the normal processes of swallowing and other muscular reflexes in the pharynx and esophagus protect the lungs. But in individuals who are already ill, have diminished consciousness, or difficulties swallowing—precisely the people for whom feeding tubes may be a consideration—this natural defense may be weakened, leading to aspiration pneumonia despite the presence of a feeding tube.

Absolute contraindications to feeding tube placement include conditions in which the feeding formula or water cannot be absorbed by the body or the gastrointestinal tract is obstructed. An example is an individual with cancer that has spread to the intestines and grown so that the intestinal lumen is closed. Using a feeding tube in this situation would result in vomiting and severe abdominal pain. Other contraindications include individuals who are in such severe kidney, heart, or liver failure that the body cannot process, metabolize, or excrete the nutrients or fluids that would be given by a feeding tube. An example of a relative contraindication to beginning the use of nutrition and hydration through a feeding tube is a person in the very last stages of cancer. Ceasing to drink or eat in the last few days of life is part of the dying process. Inserting a feeding tube and administering formula and fluids runs a risk of fluid overload, the development of edema, and severe respiratory difficulties.

Types of Feeding Tubes Once appropriate indications for the use of a feeding tube are noted, a choice must be made regarding the type. Feeding tubes come in a variety of types. Nasogastric feeding tubes are thin tubes inserted into the nostril, threaded into the nasopharynx, and then advanced down the esophagus into the stomach or, frequently, into the first portion of the duodenum. Gastrostomy tubes are inserted directly into the stomach, either surgically or, more commonly, by placing an endoscope through the skin. This latter type of type placement, commonly known as a PEG (percutaneous endoscopic gastrostomy) tube, involves passing an endoscope through the mouth, then into the esophagus and stomach, as is routinely done in the investigation

of ulcers, abdominal pain, or esophageal reflux. Once the endoscope is in the stomach, the physician performing the procedure positions the lighted scope next to the front wall of the stomach. The light within can be seen as a red glow on the surface of the abdomen; it guides the placement of an incision through which a tube is placed into the stomach or advanced into the duodenum.

Feeding tubes can also be placed more distally in the gastrointestinal tract. Jejunostomy tube placement can be performed either surgically or by a method similar to PEG tube placement; this tube is advanced into the jejunum.

Why would clinicians use one feeding tube rather than another? All feeding tubes are associated with some aspiration of saliva, esophageal contents, and regurgitated stomach contents. For short-term use—up to approximately two weeks—a nasogastric feeding tube can be a temporary therapeutic measure. These tubes, however, can press against the delicate lining of the nostrils and pharynx and lead to ulceration. They also can interfere with drainage from the sinuses and lead to blockage and infection. Although they are sometimes used for a prolonged period of time, the risks of ulceration and infection make them a less-than-ideal choice. Some patients must be restrained so that, in a moment of confusion, they do not pull on the tube and dislodge it.

Gastrostomy tubes are indicated when tube feeding will be needed for more than two weeks. Surgically placed gastrostomy tubes are inserted when a person has had previous abdominal surgeries or when placing the tube endoscopically would be dangerous. PEG tube placement is normally well tolerated in appropriate patients. Because PEG tubes require sedation, patients who are extremely ill or who have serious breathing difficulties can be at risk of complications from drops in blood pressure or respiratory arrest during placement. These complications are rare. Other complications that occur with PEG tube placement include perforation of the gastrointestinal tract, infection of the abdominal cavity (known as peritonitis), bleeding, and local infec-

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tion at the site of the tube placement. Serious complications are uncommon.

Jejunostomy tubes are used when the patient has persistent problems with aspiration of stomach material into the lungs. In these situations, a tube is placed in the jejunum, the second portion of the small intestine. A jejunostomy tube may limit massive aspiration from the stomach into the lungs.

Jejunostomy tubes require the use of different formulas than other feeding tubes (sometimes more expensive than gastrostomy tube formulas), and patients can have more difficulties with diarrhea. Jejunostomy tubes are associated with the same risks as gastrostomy tubes; they can also be placed in the jejunum through the skin by introducing a tube into the stomach and then threading it into the jejunum.

Whether placed nasally, in the stomach, duodenum, or jejunum, a feeding tube requires feeding formula and fluid prescribed by a physician and frequently based on the recommendations of a registered dietician. The feeding formulas are usually commercially prepared liquids that contain mixtures of carbohydrates, fats, proteins, vitamins, and minerals. Depending on the concentration of the solution, the fluid losses of the patient, and other considerations, additional water must be added to the feeding solution to avoid dehydration. Tube feedings can be ordered as bolus feedings (where a relatively large amount is given over a short period of time several times a day) or through a continuous drip in which the solution is administered at a precise rate for 18 or more hours a day. The type of feeding solution and delivery depend on a number of factors. Patients who are tube-fed require careful monitoring—especially initially—of their fluid status, metabolic parameters, and overall nutritional condition. Bolus feedings can allow a person to be mobile when not being fed, but they do have a higher risk of aspiration. Drip feedings carry a lesser risk of massive aspiration but limit mobility and independence.

Aside from the small but real possibility of complications with feeding tube placement and

the danger of aspiration, feeding tubes can be accompanied by diarrhea and other complications. Overemphasizing these risks would be irresponsible, however. In fact, such complications are most frequently annoyances and irritants rather than major disasters. Many patients tolerate feeding tubes and tube feeding. However, the use of feeding tubes is not carefree. Diarrhea, transient pneumonia, restraints that keep a confused patient from pulling a tube out, severely restricted mobility, and occasional clogging by pill fragments are day-to-day occurrences with feeding tubes. Feeding tubes are burdens, but the degree of burden varies from patient to patient.

Assessing the Efficacy of Artificial Nutrition and Hydration with Feeding Tubes The ethical controversy surrounding decisions to withhold nutrition and hydration in persons in a PVS makes it clear that feeding tubes can keep people alive for years. This obvious fact does not support an extrapolation to other situations in which feeding tubes may be considered. Individuals in PVS tend to be relatively young and healthy except for the injury or accident that resulted in the vegetative state. As a result, they often have long life spans. Whether artificial nutrition and hydration offer the same benefit to those who receive feeding tubes most often—usually aging individuals who may be chronically ill or who have multiple conditions with a greatly diminished functional status—is not clear.

Not much literature exists on the efficacy of artificial nutrition and hydration in maintaining life or improving function. Two studies, however, suggest that the placement of feeding tubes is associated with a high mortality rate. The mortality rate is not a result of the tubes themselves—rather, feeding tubes are often placed in people who are dying. Published articles suggest that the outcome of artificial nutrition and hydration depends heavily on the underlying condition of those who undergo this procedure. A review of hospitalized Medicare beneficiaries who underwent gastrostomy tube placement in one year (1991) revealed a 15 percent mortality rate in the hospital and an overall mortality rate of nearly 24 percent at 30 days and slightly more than 80 percent in 3 years.¹ A study of Veterans Administration (VA) patients who received a PEG tube over a two-year period showed that almost a quarter of the patients died during the hospitalization in which the PEG tube was placed. Of the group of patients in this study, the median survival was only 7.5 months. The results of the VA study indicate that PEG tubes are placed in

severely ill patients who have a very poor life expectancy, many of whom are terminally ill.² The conclusions of the study's authors demand careful reflection: "The substantial mortality rates may be reason to consider that some enterally fed patients who do not have swallowing disorders are not dying because of a lack of nutrition, but rather, lack the need to eat because they are dying."³

ETHICAL GROUNDING FOR DECISION MAKING ABOUT ARTIFICIAL NUTRITION AND HYDRATION

For Catholic health care, sound medical decision making requires good clinical judgment and a conscience informed by the teachings of the church. Appropriate sources for authoritative teaching about artificial nutrition and hydration include the *Ethical and Religious Directives for Catholic Health Care*, the 1993 statement "Nutrition and Hydration: Moral and Pastoral Considerations" from the United States Conference of Catholic Bishops Pro-Life Committee, and the remarks on this topic by Pope John Paul II made on October 2, 1998, during the *ad limina* visit of a group of bishops from the United States. All three documents show substantial agreement on the presumption in favor of medically assisted nutrition and hydration.

The *Ethical and Religious Directives* state, "There should be a presumption in favor of providing nutrition and hydration to all patients, including patients who require medically assisted nutrition and hydration, as long as this is of sufficient benefit to outweigh the burdens involved to the patient."⁴ The Holy Father echoes the presumption in favor of nutrition and hydration. He differentiates between the right to refuse overzealous treatments that prolong dying "from the ordinary means of preserving life, such as feeding, hydration, and normal medical care." Pope John Paul's statement is similar in tone and content to the *Ethical and Religious Directives*: "... while giving careful consideration to all the factors involved, the presumption should be in favor of providing medically assisted nutrition and hydration to all patients who need them."⁵

Clinicians looking for guidance from these documents need to focus on their responsibility as physicians. Only physicians have the competence to make medical decisions. Neither the bishops nor the Holy Father have the competence to make a medical decision. The bishops and the pope do, however, have the responsibility of authoritative moral teaching. Thus, they consider the tradition of the church and the situation

of the times when making recommendations about what is appropriate from an ethical perspective. Our times are filled with considerable challenges to respect for the dignity of the human person. These can be seen in attitudes in favor of euthanasia of the sick and elderly, for example, and in a callous lack of concern for the basic needs of those who cannot care for themselves.

All the statements mentioned above make it clear that food and water must be made available to people who can eat or drink. For those individuals who cannot eat or drink, a presumption in favor of medically assisted nutrition and hydration exists. As authoritative teachers who guard the faith, the bishops and the Holy Father must protect the value of life from conception to natural death; thus they make this presumption clear. But this does not translate into a requirement that a feeding tube be used in every clinical situation. As Pope John Paul II stated, careful consideration must be given to all the factors involved in the decision, meaning that the medical details of the case are crucial.

The word *presumption* means what it customarily means. It is not a rule without exceptions. A presumption in favor of medically assisted nutrition and hydration means that clinicians should use feeding tubes unless a good reason to the contrary, based on their knowledge and experience, exists. Creditable reasons that would overrule a presumption in favor of tube placement include:

- A medical contraindication to tube placement
- A prudent medical judgment that medically assisted nutrition and hydration would not likely change the outcome (the patient is dying from an underlying condition and tube placement would, at best, prolong the dying process or possibly even hasten death)
- A decision that the burdens of the treatment would outweigh the benefits

Thus, the presumption in favor of medically assisted nutrition and hydration is not relevant when a person is in the last days of battling cancer or a terminal illness, such as severe congestive heart failure. The results of studies of Medicare beneficiaries and VA patients also suggest that the presumption has less force in persons who have a limited life expectancy because of medical illnesses and poor functional status.

MAKING CLINICAL DECISIONS

How does one synthesize clinical experience and church teaching into actual clinical decision making? A few rules of thumb may be helpful.

- Always make sure that persons who can swallow receive oral fluids and food. Removing food and fluids from those who can eat and drink on their own or with the assistance of another person is never appropriate.

- Do not offer medically assisted nutrition and hydration to those whose failure to eat or drink is part of the last stages of dying, such as with terminal cancer or advanced congestive heart failure. In these cases, the burdens of medically assisted nutrition and hydration are extremely high and benefit is minimal. These treatments could potentially cause premature death and increase suffering.

- Be cautious in using feeding tubes in persons with end-stage dementing illnesses or multiple medical illnesses and limited functional status. The benefits are uncertain and the burdens are not trivial.

- Use feeding tubes in situations of transient swallowing problems with a reasonable hope of recovery. For example, an older individual with moderate Parkinson's disease may, in the setting of a flu-like illness, have a severe exacerbation of Parkinson's and difficulty swallowing. This can lead to a vicious cycle in which the person cannot take the anti-Parkinsonian medication. In this setting, a feeding tube can allow for administration of medication, preservation of fluid and electrolyte balance, and recovery of function.

- The use of feeding tubes in PVS remains controversial. Because a period of time is necessary to make the diagnosis, presume the placement and use of a feeding tube at least as a trial measure to see if any recovery of function occurs.

- Remember that the presumption in favor of medically assisted nutrition and hydration is like the presumption in favor of resuscitation in the setting of cardiac arrest. It is strongly favored, but some situations exist in which it makes no sense and may be clinically wrong.

- A key factor in placing feeding tubes is informed consent. In the United States, a tube cannot be placed without the agreement of the patient or his or her surrogate. In Catholic health care institutions, a person can refuse therapy when he or she, making a free and informed decision, feels the burdens outweigh the benefits, unless withholding or withdrawing the procedure would be contrary to Catholic moral teaching.⁶ Those cases in which the caregiving team believes a feeding tube is strongly indicated and that the patient or surrogate is not free or informed—or the action is contrary to Catholic moral teaching—necessitate institu-

tional review and discussion, leading to the establishment of policy on the handling of such cases.

STRUGGLES OVER MEDICALLY ASSISTED NUTRITION AND HYDRATION AS A SIGN OF THE TIMES

Discussions of medically assisted nutrition and hydration may have unfortunately kept those of us in Catholic health care from looking more carefully at the underlying issues. We live in a society characterized by powerful and contradictory tendencies. These include an increasing disrespect for life, open support for euthanasia and assisted suicide, and conversely, a highly aggressive technological approach to medical problems, especially in the care of the dying, that may provide a narrow answer but ignore the patient's greater needs. Those who care for the elderly and chronically ill, or for other patients for whom a decision about feeding tubes and medically assisted nutrition and hydration is not uncommon, must carefully examine the issues beneath the surface that can drive feeding tube placement.

We need to look more closely at how we approach feeding difficulties in our institutions. Feeding a person with dementia can be very time consuming. Some feeding tube decisions may be made because of a lack of staff necessary for hand-feeding. We should make staffing decisions and create care plans to ensure that these basic needs are met, although that will not be easy. Some nursing home administrators feel forced to push for feeding tubes out of a concern that state officials will treat weight loss and dehydration in nursing home residents with punitive sanctions. Some may make that attempt. Catholic health care, however, would do this nation a service by developing care protocols that emphasize a variety of interventions that make it clear that residents are not neglected and that ordinary means are used to provide nutrition and hydration to persons who, for a variety of reasons, have difficulty eating and drinking.

We also need to consider that difficulties with nutrition and hydration are often a sign that a person is approaching the end of life. These difficulties will not

cause death. In the care of older persons with advanced dementia or other late-stage illnesses, the underlying approach should be one of palliative care. Determining whether use of a feeding tube makes sense is vital. Bringing family members into care planning is wise. Encouraging family members to assist with feeding and other aspects of palliative care can help assuage guilt and alleviate demands for technological response to the commonly expected decline that comes at the end of life.

Finally, some of these situations are ambiguous. If the care of patients was clear-cut, our decisions would be simpler. But it is not, and the church realizes that good people can only do their best. The teaching of the bishops and the Holy Father about a presumption in favor of medically assisted nutrition and hydration does not remove clinical ambiguity. Rather, it means that physicians and other caregivers need to grow in skill and competence and pay careful attention to individual circumstances, which are fundamental to making decisions for a particular patient. Efforts also need to be redoubled to provide care, comfort, and solace for people who are facing the end of life. □

NOTES

1. M. D. Grant, M. A. Rudberg, and J. A. Brody, "Gastrostomy Placement and Mortality Among Hospitalized Medicare Beneficiaries," *Journal of the American Medical Association*, vol. 279, 1998, pp. 1973-1976.
2. L. Rabeneck, N. P. Wray, J. N. Petersen, "Long-Term Outcome of Patients Receiving Percutaneous Endoscopic Gastrostomy tubes," *Journal of General Internal Medicine*, vol. 11, 1996, pp. 287-293.
3. Grant, et al.
4. United States Conference of Catholic Bishops, *Ethical and Religious Directives for Catholic Health Care Services*, 2001, Directive 58, p. 31.
5. *L'Osservatore Romano*, October 7, 1998.
6. United States Conference of Catholic Bishops, *Ethical and Religious Directives for Catholic Health Care Services*, 2001, Directive 59, pp. 31-32.

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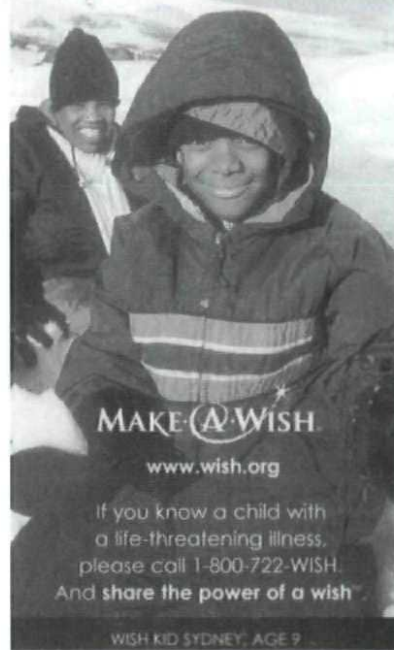
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Vincent M. Bilotta, Ph.D.
President

This is the day
I first tasted snow.
And my sister made
a castle of it.
And my dad rolled around in it.

This is the day we all got
to forget I was sick.



JOURNAL OF THE CATHOLIC HEALTH ASSOCIATION OF THE UNITED STATES

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