

Artificial Hydration/Nutrition



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Acknowledgement



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Disclaimer



While this program provides educational information, this information is not medical advice. Health care providers should exercise their own independent clinical judgment. Some of the information cites the use of a product in a dosage, for an indication, or in a manner other than that recommended in the product labeling.

Accordingly, the official prescribing information should be consulted before any such product is used.

Objectives



1. Define the following terms
 - Non-oral feeding
 - Artificial hydration
2. Describe the benefits and burdens of artificial nutrition and hydration (ANH) at the end of life.
3. Review ethical and religious issues.
4. Describe communication strategies with family and staff concerning EOL hydration/feeding.
5. Describe the role of appetite stimulants.

Case Question



- You are taking care of an 86 yo female who has been admitted 3 times in the past year with aspiration pneumonia. The patient's family is very concerned about recurrent aspiration and one of the doctors has recommended that the patient have a feeding tube placed. They ask you what the risks and benefits are of feeding tube placement.

- How do you answer this question?

Definitions



- ANH refers to any method whereby food or water is provided other than chewing/ swallowing.
- Non-Oral Feeding
 - Provision of food by nasogastric tube (NG), gastrostomy tube (G tube), Gastro-jejunostomy (G-J tube) or Total Parenteral Nutrition (TPN)
- Artificial Hydration
 - Provision of water or electrolyte solutions by any non-oral route (Intravenous, subcutaneous, NG/G/GJ tube)

Dying from a chronic illness



- At some point, all dying patients lose their appetite
- At some point, all dying patients lose their ability to take in sufficient food and water to meet basic physiologic needs
- ANH decisions near the end of life often fall to families or other surrogate decision makers due to the patient's condition

Definitions



■ Anorexia

- Lack of appetite, resulting in the inability to eat, and weight loss, especially as a result of disease.
- Major contributing factor to cachexia syndrome.
- Occurs in most cancer patients
- Common in other chronic diseases: end-stage heart, lung, liver disease.

■ Cachexia

- State of malnutrition and wasting resulting from anorexia; advanced protein calorie malnutrition

Cachexia



■ Primary Cachexia

- Involuntary weight loss as a result of an illness
- Metabolic rate exceeds caloric intake
- Inability to conserve protein
- AIDS, cancer, sepsis and major trauma

■ Secondary Cachexia

- Dysphagia (head and neck cancer)
- Oral and esophageal candidiasis
- Poor oral hygiene
- Gastric outlet obstruction
- Small bowel obstruction

Metabolism in Cachexia



- ↑ metabolic rate
- ↑ glucose consumption
- ↑ protein breakdown
- ↓ protein and fat synthesis
- ↑ acute phase protein response

Assess for treatable causes



- Chronic pain
- Mouth conditions
 - Dryness; Mucositis
 - Thrush; HSV ; Aphthous ulcers
- GI motility problems
 - Constipation; Reflux esophagitis; Nausea
- Metabolic imbalance
- Psychological distress:
 - Anxiety
 - Spiritual distress
 - Depression
- Poorly fitting dentures
- Intolerance of institutional food

Treatment-Drugs



- **Drugs**
 - Progestin (megesterol)
 - Cannabinoids (dronabinol, nabilone)
 - Glucocorticoids (dexamethasone)
- **Drug Impact**
 - Only modest weight gain at best
 - Little to no impact on survival duration
 - Toxicities can limit use
 - Generally not helpful in cases of massive weight loss

Nutritional Therapy



- **Oral Supplements**
 - High calorie/protein drinks
- **Tube feeding**
 - Indicated in selected patients undergoing cancer treatment (Head/Neck cancer during XRT)
 - Use in dying patients has high morbidity, no impact on survival
- **Hyperalimentation (TPN)**
 - Indicated only in patients unable to tolerate enteral feeding, who have an expected prolonged survival
 - Use in dying patients has high morbidity, no impact on survival

Typical Patient Scenario



- Anorexia with early weight loss
 - Correctable conditions addressed
 - Oral supplements used with short-term weight stabilization
 - Dietary counseling
- Continued weight loss
 - Increasing family concern
 - Family concern typically >>> than patient concern
 - Questions raised about the use of enteral (G-Tube) or parenteral nutrition (TPN)

Source of Distress



No subject provokes greater distress and uncertainty, among both families and health professionals, than issues surrounding the use of artificial feeding and hydration in the dying person

Why?

Common Concerns



- Oral intake is a symbol
 - Eating represents living; the most basic of human needs
 - Family role as protector and provider, especially true for spousal relationship
 - *I love him, therefore I must feed him*
- Confusion that withholding ANH is equal to euthanasia, assisted suicide or murder
 - Fear of legal, ethical or religious misconduct

Questions for health professionals



1. What are the benefits and burdens of ANH?
2. What are the legal, religious and cultural issues surrounding ANH?
3. What are recommended steps in discussing ANH?

Benefits and Burdens



- **Benefits of Artificial Hydration**
 - May prolong life in selected patients
 - May improve or forestall delirium

- **Benefits of Artificial Feeding**
 - May prolong life in selected patients
 - Younger patients
 - Trauma patients
 - ALS
 - Head and Neck Cancer

Benefits and Burdens



- Other potential benefits of Artificial Nutrition or Hydration
 - ✓ Maintains appearance of life giving sustenance
 - ✓ Maintains hope for future clinical improvement
 - ✓ Avoidance of guilt by family members

Benefits and Burdens



- Unproven benefits of artificial hydration
 - Improves quality of life
 - Improves survival across a population of dying patients
 - Improves symptom of thirst

Benefits and Burdens



- **Unproven Benefits of Artificial Feeding**
 - Reduction in aspiration pneumonia
 - Reduction in patient suffering
 - Reduction in infections or skin breakdown
 - Improves survival duration (in a population of similar patients)
 - Improves nutritional parameters in demented nursing home residents
 - Improves quality of life

Benefits and Burdens



- Burdens of Artificial Hydration
 - Maintaining parenteral access
 - Increased secretions, ascites, effusions, edema, urine output
 - Fuss factor: site care, IV bag changes

Benefits and Burdens



- **Burdens of Artificial Feeding ***
 - Risk of aspiration pneumonia is the same or greater with tube feeding than without
 - Increased need to use restraints
 - Wound infections, abdominal pain, and tube-related discomfort
 - Other tube problems
 - Cost; Indignity; Loss of pleasure of oral intake
 - Less human interaction if patient not being fed by nursing staff, etc.

* Much of this data comes from use of tube feeding in advanced dementia

Tube feeding in advanced dementia *



- In-hospital mortality: 25%
- One-year mortality: 60%
 - 10% readmission rate for complications
 - aspiration >>>> other
 - Predictors of early mortality:
 - Increased age, CNS pathology (CVA, dementia), cancer-except Sq Cell Head/Neck, disorientation, low albumin
 - For those patients that did not die in 1st year, 70% showed no improvement in functional or nutritional status

* Multiple retrospective cohort studies: 1995-99

* Finucane TE, et al. Tube Feeding in Patients with Advanced Dementia. JAMA 1999;282:1365-1370

Alternatives



- Alternatives to Non-oral Feeding
 - Allowing patient to eat/drink ad lib, even if aspiration risk is present
 - Having someone feed the patient by hand
 - No oral or non-oral food with the expectation that death will result in days to a few weeks
 - Aggressive comfort measures will always be provided

Summary of Benefits/Burdens



- Few medical benefits
- Substantial morbidity
- Positive psychological benefits for family

Ethical and Religious Issues



- There is no professional mandate to provide ANH when burden/risk is greater than benefit.
- *The AMA says:*
Life-sustaining treatment is any treatment that serves to prolong life without reversing the underlying medical condition. Life-sustaining treatment may include, but is not limited to, mechanical ventilation, renal dialysis, chemotherapy, antibiotics, and artificial nutrition and hydration.

AMA Code of Ethics 2008-9 2.20 Withholding or Withdrawing Life-Sustaining Medical Treatment.

Ethical and Religious Issues



- Withholding or withdrawing ANH is not:
 - **Euthanasia:** the administration of a lethal agent by another person to a patient for the purpose of relieving the patient's intolerable and incurable suffering.
 - nor
 - **Physician-assisted suicide:** when a physician facilitates a patient's death by providing the necessary means and/or information to enable the patient to perform the life-ending act

AMA Code of Ethics 2008-9 2.21 and 2.211; Euthanasia, Physician- Assisted Suicide.

Ethical and Religious Issues



- ANH is a *medical* treatment, not *ordinary* care
 - Ordinary care refers to oral food/water, clothing and shelter

Ethical and Religious Issues



- When a patient cannot speak for him/herself decisions can be made on the following basis:
 - Expressed wishes in a previously completed Advance Directive.
 - Legal guardian **
 - Power of Attorney for Health Care **

**Note: in the absence of previously expressed desires, states have different standards for when/how a surrogate decision maker may authorize withdrawal or withholding of ANH, check your own state law.

Ethical and Religious Issues



- Religious/Cultural Issues
 - Most, but not all, religions and cultures recognize that when someone is dying, ANH may be withdrawn/withheld if the burden exceeds benefit.
 - Health professionals' personal values (for or against ANH) commonly conflict with those of the patient/surrogate.
 - Such conflicts should not preclude the presentation of all relevant medical information and all treatment options.

Discussing ANH



- Advance Care Planning - encourage patients while still well to:
 - Discuss wishes with surrogates
 - Complete an Advance Care Planning document, including *Power of Attorney for Health Care* and/or *POLST form*.
 - Some states require a written advanced directive that specifically mentions whether ANH can be stopped/withheld by a surrogate. If this is the case, make sure your patients include this in their directive

Discussing ANH



- When patients cannot make their own decision
 - Check for advance care document
 - Present all medical facts and treatment options to surrogate
 - Solicit input from patient's "voice"
If your ___ were sitting here, what would he/she say/want?
 - Make a recommendation; Give *permission* to stop or not start ANH.
 - Families are generally looking for a recommendation to help ease their feelings of guilt.

Helpful Phrases



- *What do you know about artificial ways to provide food?*
- *All dying patients lose their interest in eating in the days to weeks leading up to death, this is the body's signal that death is coming.*
- *When people are dying, their body rejects food. They usually do not feel hungry, and eating may cause them to feel ill.*
- *I am recommending that the (tube feedings, hydration) be discontinued (or not started) as these will not improve his/her living; these treatments, if used, may only prolong his/her dying.*
- *Your (relation) will not suffer; we will do everything necessary to ensure comfort.*
- *Your (relation) is dying from (disease); he/she is not dying from dehydration or starvation.*

Conflict Resolution



- Provide information and a recommendation
- Work to remove sense of guilt
 - Seek out the patient's "voice" (*"what would your wife say if she could tell us her wishes"*)
 - Make a recommendation
- Use time as a ally
- Offer consultation: chaplaincy, palliative care, ethics

Conflict Resolution



- Consider time-limited trials of ANH based on a functional goal-
 - “*Lets try the tube feeding for 2 weeks with the hope that your ___ will be more interactive; I suggest we meet again after 2 weeks and reassess how things are going.*”
- Do not view process as a win/lose situation
 - do not feel that you have “failed” if you present the information to the family and they still decide to have ANH.

Case Question



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- How do you answer this question?

Answer



- First, assess what the family knows about dementia
- Find patient's voice if possible
- Review family's goals of care for the patient
- Review your knowledge of the literature
- Normalize family's difficulty making this decision

Learning Points



List 3 new things you learned from this presentation.

- 1.
- 2.
- 3.

References



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