INFORMATION FOR PATIENTS/FAMILIES

Artificial Fluids and Nutrition

When is artificial feeding and nutrition most appropriate?

- If you have a temporary condition that prevents swallowing, artificial fluids and nutrition can be provided until you recover.

What is involved in the procedure?

- An intravenous catheter may be placed in a vein in the skin for fluids, or sometimes nutrition.
- Alternately, a plastic tube called a nasogastric tube (NG tube) may be placed through the nose, down the throat, and into the stomach. It is approximately 1/8 inch in diameter. This can only be left temporarily.
- If feeding by this route, a more permanent feeding tube may be placed into the wall of the stomach (PEG tube or G tube).

What happens if it is not administered?

- If a person is unable to take any food or fluids due to illness, he or she will eventually fall into a state much like a deep sleep. This process will take 1 to 3 weeks.
- Before entering the deep sleep, he or she will normally not experience any hunger or thirst after the first several days.
- For a person who has an advanced illness, giving artificial hydration and nutrition may not prolong life.

What are the benefits?

- A feeding tube may reduce hunger in someone who is hungry, but cannot swallow.
- Intravenous fluids may reduce some symptoms, such as delirium.

What are the burdens?

- All feeding tubes are associated with significant risk. Around 30% of patients have signs of the liquid entering the lungs. This aspiration of fluid can cause coughing and pneumonia.
- Feeding tubes may feel uncomfortable. They can block the stomach, causing pain, nausea, and vomiting.
- Tubes for food and fluids may become infected.
- Physical restraints are occasionally needed so the patient won’t remove the tube.

Artificial Ventilation

When is artificial ventilation best used? -- If you have a temporary condition that prevents adequate breathing, a breathing machine can be used until you recover.

What is involved in the procedure? -- A tube is placed through the mouth or nose into the lung and is connected to a breathing machine.

What happens if it is not administered? -- If a patient is unable to breathe, the patient may die.

What are the benefits?

- The breathing machine allows the body time to recover.
- It prolongs life

What are the burdens?

- The breathing tube is uncomfortable. Most patients require medicine to keep them comfortable while they are on the breathing machine
- It may prolong a state of dependence in a medical setting that the patient finds not worth the discomfort
- It may prolong dying

**Cardiopulmonary Resuscitation (CPR)**

When is CPR most important?

- When the heart or lungs stop working unexpectedly (eg, after an accident or when you are walking down the street)
- When there is a possibility that the underlying problem can be fixed

What is involved in the procedure?

- Involves vigorous pressing on the chest and electric stimulation to the chest
- Medications may be administered and a tube to assist breathing may be used
- Typically lasts for 15 to 30 minutes

What happens if it is not administered?

- The loss of consciousness will be followed by death in 5 to 10 minutes

What are the benefits?

- For a patient with an advanced life-threatening illness who is dying of the underlying disease, there is no benefit
- For patients with good overall health status, younger age, and administered within 5 minutes of cardiac or respiratory arrest, it may permit prolonged life

What are the burdens?

- Chest compressions could result in a sore chest, broken ribs, or a collapsed lung
- Most people who need CPR also need to be on mechanical ventilator in an intensive care unit to support their breathing for a period of time
- Fewer than 10% of all hospitalized patients survive CPR and return to their previous state (most of these people were already in a coronary care unit when the procedure was done). Most patients live for a short period after CPR, but still die in the hospital
- Only 1% to 4% of patients with multiple chronic illnesses survive to leave the hospital
- Almost no one with cancer survives to leave the hospital
- Of those who survive, many continue to live in a weaker state, or with brain damage. Half the people who survive are chronically dependent

*National Cancer Institute grant (R25 CA76449) to Sara J. Knight, Ph.D., at the Robert H. Lurie Comprehensive Cancer Center provided the funding for the development of this program. This material was adapted from the EPEC project (Education for Physicians on End-of-life Care).*