III. Definitions of "Life-Sustaining" Interventions

What type of life-prolonging or sustaining intervention do I want? There are three kinds to consider: cardiopulmonary resuscitation (CPR), artificial provision of nutrition and hydration, and active treatment to fight disease.

Cardiopulmonary Resuscitation[1]

Cardiopulmonary resuscitation, commonly known as "CPR," is the act of reviving someone whose heart and/or breathing have stopped. In a hospital setting, when a patient's heart stops, extraordinary measures are used to restart their heart. Treatments often include the use of CPR, electrical shocks to the heart, injectable medications and often, a ventilator.

While CPR does benefit some patients, it is not always the best choice, especially for those with multiple medical problems and terminal illnesses. It is best to have a frank, open discussion with your healthcare provider regarding the benefits and risks of CPR for your specific disease and goals.

CPR is a standard order in a care facility and must have a written order restricting its use if the person or their designated agent chooses so. The order for a "DNR" or Do Not Resuscitate must be given by a physician and the family or patient must request this.

[1] *Dunn, H. (2009). Hard choices for loving people. A&A Publishers, Inc. Landsdowne, V.A.*

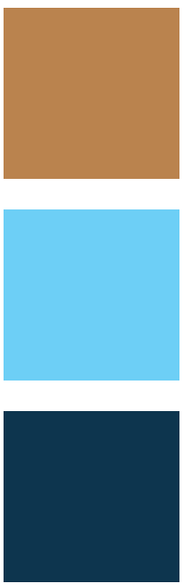
Pros

• CPR is effective for a person who is healthy prior to the cardiac event.

Cons

- CPR is rarely effective for persons with two or more medical problems, those who are dependent on others for care (such as nursing home residents) and those with a terminal disease.
- Once performed, CPR must be followed by other life prolonging measures such as advanced medical care and hospitalization.
- Frail patients have an increased risk of their ribs being broken and a lung or spleen being punctured during CPR.
- Brain damage is possible and likely in patients who have not been revived in a short amount of time. This means a person could experience small changes in their mentation or could be permanently unconscious.

Artificial Hydration and Nutrition[2]



There are occasionally times when a person is unable to eat or drink normally. At this point, it is sometimes appropriate to find other means to feed and hydrate a person. Tube feedings may be considered and can occur in one of two ways. A person may have a tube inserted through their nose into their stomach, called a nasogastric tube, or they may have a tube surgically placed in the stomach, called a gastrostomy tube. These two devices allow water, liquid nutritional supplements and medications to be administered to a person who is unable to take these items safely by mouth.

General intravenous (IV) hydration is another means of providing fluids to a patient who cannot directly take them anymore due to disease or illness. A person can receive hydration with various liquid preparations via a vein in the arm. This is common in the hospital setting.

Many physicians believe that the use of tube feedings during end-of-life care is more of a risk than a benefit to terminally ill patients. Physicians who advocate for the removal or cessation of artificial feedings and hydration often see the inability to take in food or water by mouth as a terminal medical condition. They view the death of such patients as occurring from the terminal disease, not from starvation or dehydration, and therefore allow the patient to have a natural passing. They believe that choosing not to force feed a patient is not choosing to end their life, but rather, choosing not to prolong their suffering.

[2] *Dunn, H. (2009). Hard choices for loving people. A&A Publishers, Inc. Landsdowne, V.A.*

Artificial Hydration and Nutrition Continued...

Pros

- Beneficial for those who cannot swallow safely such as patients who have had a stroke or a short-term disability affecting their mouth or oral function.
- Can prolong life, although for most people it does not.

Cons

- Feeding tubes carry the risk of pneumonia from aspirated fluids or displacement.
- Artificial feedings cause fluid in the lungs making breathing harder, increasing the need for suctioning, increasing edema in the body, which in turn increases pressure and pain around tumors and body parts.
- Does not allow for the natural release of pain-relieving chemicals in the body that occur as a person becomes dehydrated which can give a "mild euphoria" to the patient.
- IV sites frequently have to be changed often requiring multiple needle sticks.

Active Treatment to Fight Disease

There are a variety of intensive treatments that you may encounter during a hospital stay when you are ill, including a ventilator, dialysis, invasive internal monitoring, electric pacemaker and other devices for heart function, major surgery, antibiotics, blood transfusion and chemotherapy. Below is a description of each.

A VENTILATOR, which may also be called a respirator, is a machine commonly used in hospitals to assist a person to breathe if they are unable to breathe on their own. Ventilators can be beneficial in short-term crisis; however, there are multiple risks and complications associated with this treatment.

DIALYSIS is another common treatment that involves the use of a machine to filter the blood when the kidneys are no longer able to do so. This treatment can be for acute illnesses or while one is awaiting a kidney transplant, or is a permanent treatment for more serious kidney issues.

INVASIVE INTERNAL MONITORING is the use of tubes and catheters inserted into veins to deliver fluids, medications, take blood samples and monitor pressure readings. These can be temporary options that are meant to be removed within days to months, such as intravenous lines or more permanent options which can stay in place for years, such as implanted ports.

ELECTRIC PACEMAKERS and other devices for the heart are also used as active treatments for people who have an irregular heart beat or have risks of cardiac arrest (their heart stopping). These are often implanted devices that require surgery.

MAJOR SURGERY is another treatment option that people are often forced to consider when they are ill. This may include surgery that drastically alters the body, but can also relieve pain and restore function depending on the severity of the issue.

ANTIBIOTICS are frequently used to fight infections and may come in a pill form or given intravenously. Risk is involved anytime you take medication, as normal flora can be “killed off.”

BLOOD TRANSFUSIONS are necessary at times to restore the amount of blood in a person who has severe bleeding or who is not making the correct amounts of certain blood components. Blood transfusions always carry a risk as often the donor blood comes from another person.

CHEMOTHERAPY and radiation are common treatments used in the treatment of cancer. Chemotherapy uses drugs to attempt to stop and slow the growth of cancer while radiation therapy uses radiation to shrink tumors and kill cancer cells. Both chemotherapy and radiation are not without risks and adverse effects.

Summary

Patients with multiple medical problems, or who are dependent on others, benefit from CPR less than 2% of the time. The risks of CPR usually outweigh the benefits for terminally-ill patients and reduce the possibility of a peaceful death. It is important to remember, that patients and family members have the right to request an order to not attempt resuscitation. For healthy patients who have a temporary and difficult time eating, feeding tubes can help get them through that period. Although unconscious patients can be maintained for years with a feeding tube, it is difficult to decide to withdraw such treatment, therefore it is something to really contemplate in advance. Patients may leave instructions that may include trying a treatment for a limited period. Other treatments to fight disease, such as ventilators, dialysis, chemotherapy and others mentioned may serve to alleviate symptoms, and can also prolong suffering and therefore, should be carefully considered for patients with a life limiting illness.