Life Support Interventions
In The Terminal Phase Of Life:
Understanding The Unintended Consequences

The **terminal phase of life** occurs when all body functions begin to shut down. This may begin to happen a month or so, a few weeks or a few days before the person dies.

The blood circulates more slowly. The kidneys put out less urine because their function depends on a good blood supply. Swallowing may become difficult. The person's appetite disappears because the stomach and intestines are shutting down and cannot carry out their jobs of digestion and absorption. The heart and lungs function poorly due in part to slowed blood circulation and the changing chemical balances in the body. Communication is often restricted because of severe weakness and less blood supply to the brain. Infections are more likely due to decreased activity of the immune system.The person has multiple organ failure and is dying.

At this point it is necessary to keep in mind the possible unintended consequences of attempting to intervene with life support measures.

Please note: The following information on life support interventions provides guidelines to stimulate open discussion by patients, families and healthcare providers to determine appropriate goals of care when the body is shutting down and organs are failing. All of these life support options can be very effective when needed in cases of **acute** illness or injury to help the patient get through a **crisis** but may increase discomfort for the dying patient and will not change the outcome. The medical information has been reviewed by hospice, palliative care, trauma and critical care physicians. Journal citations are available upon request.

CPR--Cardiopulmonary Resuscitation (when heart and/or breathing stop)

- Usually results in ICU (Intensive Care Unit) admission for aggressive life support interventions. Less than 2% survive to leave the hospital.

- Patients who do respond to CPR may have broken ribs. This can lead to a punctured lung requiring insertion of a chest tube (a source of discomfort and possible infection), and/or a ruptured spleen or liver that would require surgery.

- The patient may be put on a ventilator indefinitely to assist breathing.

- Depending on how long the brain was deprived of oxygen, there may be significant brain damage resulting in coma or a persistent vegetative state.

- CPR can cause much discomfort and many additional problems for the patient. It will not change the outcome in the terminal phase of life.

Ventilator Placement (when the patient can not breathe on his/her own)

- For a patient in respiratory distress, a tube is put through the mouth down into the trachea (wind pipe) and attached to the ventilator. The machine moves air in and out of the lungs, breathing for the patient. Sedation is often used to prevent the patient from fighting the

machine. Verbal communication is impossible. Frequent suctioning of the trachea may be necessary to remove accumulated secretions. This can be very uncomfortable.

- If the tube is to be left in place more than a few days the doctor will ask for permission to make an opening into the trachea at the base of the throat, place a tube into the opening and connect it to the ventilator. Suctioning is frequently needed and the site is often a source of infection. Most likely the patient will be in the ICU where visitation is restricted thus denying the patient the comfort of the family's continuous presence.

- In the terminal phase of chronic obstructive pulmonary disease (COPD) or other chronic diseases affecting the lungs, a trial of a few days on a ventilator may be proposed. It will not add to the quality of life or change the ultimate course of the disease. The patient can usually be kept comfortable through palliative care (comfort care) measures.

Artificial Nutrition And Hydration (when the patient can not eat or drink on his/her own)

- When body organs are failing, supplying hydration (water) through an IV tube into a small vein may cause fluid overload and swelling in the tissues and lungs that can result in difficulty breathing. Veins often collapse necessitating frequent IV site changes, an additional discomfort and risk of infection for the patient.

- A temporary feeding tube (nasogastric tube) can be passed through the nose into the stomach. It is very uncomfortable for the patient who may try to pull it out if agitated or confused. Frequently a patient will be restrained under these circumstances.

- A permanent feeding tube (gastrostomy or PEG tube) must be surgically implanted into the stomach through the abdominal wall. The site can be a source of infection.

- Both of these feeding tubes deliver nutrition and hydration to the stomach that can no longer digest and absorb it adequately. Often the results are regurgitation and aspiration of food into the lungs that can cause aspiration pneumonia. Frequently diarrhea, with subsequent breakdown of skin in the rectal area, adds to patient discomfort.

- Total parenteral nutrition (TPN) provides hydration and nutrition directly into the blood stream through an IV into a large vein. This can cause severe swelling in tissues and lungs due to decreased blood circulation and kidney failure. The body cannot rid itself of the fluid overload. Also, the IV site provides another risk for infection.

- Supplying artificial nutrition and hydration in the terminal phase of life can cause much discomfort and many additional problems for the patient.

Renal (Kidney) Dialysis (when the kidneys are no longer able to produce urine)

- This is can be a very stressful procedure for the body. It adds to the discomfort of the patient and usually must be done at least three times a week, sometimes more often.

- Renal dialysis in the terminal phase of life does not improve comfort or quality of life for the patient. It will not restore normal kidney function.

Other Possible Options

- **Chemotherapy, Radiation Therapy and/or Surgery**
  When used in the terminal phase of life these interventions can add great stress to body functions that are already shutting down. This provides futile (ineffectual) care that can create more discomfort for the patient and will not reverse the dying process.

- **Blood transfusions**
  May prolong life for a few days, but won't change the outcome. It is futile care.

- **Antibiotic therapy**
  Antibiotics often have uncomfortable side effects (i.e. nausea, vomiting, diarrhea, yeast infections, etc.) Activity of the immune system has decreased and antibiotics don't work as well. Pneumonia, sometimes called "the old person's friend", is a common problem in the terminal phase of life. Treating it with antibiotics will not change the final outcome.

- **ICU (Intensive Care Unit) Admission**
  The goal of the ICU is to sustain life through aggressive, curative therapy and use of life support interventions. If these are not ordered the patient will be moved out of the ICU.

Complete Information Is Essential To Giving Informed Consent For Patient Care

When faced with making these difficult and heart wrenching decisions it is important to ask pertinent questions concerning possible risks and outcomes of proposed treatments, medications and procedures.

Some Questions To Ask The Doctor

- **What is happening with (patient's name)? Please be completely honest with me/us.**

- **Is there any hope (name) can get back to his/her level of activity of a month ago?**

- **Do you think that all body functions are shutting down and that he/she is at the terminal phase of the illness (or trauma)?**

- **How will this treatment, procedure or medication you are proposing provide comfort or improve the quality of his/her life?**

- **Will it change the outcome in any way or prolong the dying process?**

- **Does his/her condition meet the criteria to activate the Living Will?**

- **Will you control pain and provide comfort care until death occurs?**

- **If this was the most precious person in your life and you truly loved him/her, how would you proceed?**

- **Will you continue to be available to me/us for information and support until death occurs? How can you be contacted?**

Questions To Ask Family Members And /Or Friends

- **What are your goals for care of your loved one--quality or quantity of life? Are you having trouble letting go? What is getting in the way? Do you have the necessary psychological, social and/or spiritual support? Would you like to talk to a counselor or chaplain?**

Remember: There Is Still Help Available For The Patient

When life support interventions are not appropriate in the terminal phase of life, palliative care (comfort care) and hospice care are viable options. Their goals are to provide pain and other symptom control plus psychological, social and spiritual support to assure the best possible quality of life for the patient, and ongoing support for the family. Death is regarded as a normal process. It is neither hastened nor postponed. Palliative care and hospice care allow the patient to have a more comfortable, peaceful death.

"How people die remains in the memories of those who live on." (Dame Cicely Saunders, founder of the first hospice in London, England)

The greatest gift you can give to your family and healthcare providers is to let them know, before the need arises, what treatments, medications and/or procedures, you do and do not want in the terminal phase of life. Talk to your doctor, examine the possible choices, make your decisions, put them in writing (a Living Will), and, most important, talk to your family about them in detail.

Be sure to appoint a trusted, willing, assertive person to have your power of attorney for healthcare decisions. That person will then be able to make decisions for you, according to your wishes, if you are not able to do so yourself. There will be no second-guessing about what you want. After death occurs the survivors will remember that your thoughtful guidance helped make memories of a more peaceful death possible.

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Resources

Hard Choices for Loving People by Hank Dunn (4th Ed, 2003). To order copies, go to **www.hardchoices.com**

Making Choices: A guide to end-of-life planning. Florida Department of Elder Affairs (2005). To order free copies go to **www.elderaffairs.state.fl.us**

Life-Support Interventions at the End of Life: Unintended Consequences, by Shirley A. Scott, American Journal of Nursing, January 2010, Vol. 110, No 1.

Informed Medical Decisions. Go to **www.informedmedicaldecisions.org**

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