

### What is Cancer?

According to the American Cancer Society, "cancer is a group of diseases characterized by uncontrolled growth and spread of abnormal cells. If the spread is not controlled, it can result in death." (<u>www.cancer.org</u>).

The characteristics of a cancer cell include the ability to:

- avoid apoptosis (programmed cell death).
- resist normal aging progress.
- grow (replicate) outside of normal controlling mechanisms.
- produce chemicals that dissolve the connective tissue.
- stimulate blood supply.
- invade and spread to other parts of the body.
- not be affected by immune system defenses.

Treatment Cancer may be treated by surgery, chemotherapy, radiation therapy, immunotherapy, monoclonal antibody therapy or other methods. The choice of therapy depends on:

- localization of the disease or if the disease is widespread
- cancer staging
- general state of the patient (Karnofsky Performance Scale or Palliative Performance Scale).

The goal of palliative chemotherapy is not to cure the patient's cancer but to attempt to control the cancer and offer the patient prolongation of life and quality of life.

Goals of palliative radiation therapy can be to attempt to control the cancer (offering prolongation and quality of life) and/or localized control of symptoms. Specific symptoms that radiation therapy may improve include:

- bone pain from bone metastases
- spinal cord compression
- brain metastases

Cancer Staging Cancer staging will determine the treatment plan and the prognosis of the patient. The three components of staging cancer involved in the staging process include:



- Tumor
- Node
- Metastasis (TNM)

The Tumor component correlates to the size or depth of the tumor. The scale starts at Tx (unable to be assessed) through T4 (tumor of large size or depth).

The Nodes component is determined by the absence or presence of lymph nodes that are positive for cancer. The scale starts at Nx (unable to be assessed) through N3 (spread of disease to lymph nodes).

The Metastasis component correlates to the presence or absence of distant spread of disease. The metastasis component has only three possible stages: Mx (unable to be assessed), M0 (no distant mets) and M1 (Mets are present). What is the prognosis? The prognosis for cancer varies based on the type of cancer (lung, breast, brain, etc.), the staging of the cancer, the patient's general state of health and response to treatment. Prognostic indicators for worsening of the disease include:

- Bone Metastasis
- Liver Metastasis
- Hypercalcemia
- Spinal Cord Compression
- Weight loss
- Asthenia
- Pathological fractures
- Fatigue
- Dyspnea
- Unsteady gait
- Lymphedema
- Lymphadenopathy
- Immobility
- Ascites
- Pleural Effusion

An excellent resource on determining prognosis in advanced cancer is EPERC Fast Fact #13.



You can find this information at http://www.eperc.mcw.edu/fastFact/ff\_013.html

#### **Palliative Care**

Pharmacological and non-pharmacological interventions should focus on symptomatic relief, prevention of complications, maintaining maximum function and optimal quality of life. Physical symptom management for the cancer patient may include:

- Pain
- Nausea
- Dyspnea
- Dysphagia
- Fatigue
- Weakness
- Constipation
- Cognitive impairment/Depression/sleep disturbance

Aggressive psychological and spiritual support is needed as patients with cancer and their families often experience fear, anxiety and depression. Collaborate with psychosocial and spiritual professionals to confirm that symptoms are managed with the most effective combination of non-pharmacological and pharmacological interventions.

Support through American Cancer Society groups (including online chat groups) is an excellent resource for patients as well as their caregivers. To find a support group, contact your local American Cancer Society.

#### Documentation: Document the following signs and symptoms:

- Weight loss
- Increasing symptom or new symptoms related to the cancer
- Diagnostic testing (Lab work, Tumor markers, MRI, CT Scans, etc)
- Declining Palliative Performance Scale or Karnofsky Performance Scale.

Documentation Tips: Document all signs and symptoms affecting physical function including onset of disease and changes over time. Include information relating the psychosocial and spiritual needs and interventions which impact the overall quality of life.

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