Home Care

A primary teaching need to prepare the client and family affected by lung cancer for home care is information about the disease itself, expected prognosis, and planned treatment strategies. Provide honest information; do not promote false hope. Include the following additional topics in teaching for home care.

- Importance of quitting smoking, especially if surgery has been performed (The client with lung cancer may have difficulty recognizing the need to stop smoking. Include information about the effects of nicotine and the tars in cigarette smoke on healing and already compromised lung tissue.)
- Planned treatments such as chemotherapy or radiation therapy, including expected effects and usual side effects of each
- Strategies to cope with noxious effects of radiation or chemotherapy

Nursing Care Plan

A Client with Lung Cancer

After coughing up bloody sputum one morning, James Mueller, a 68-year-old retired millworker, sees his physician. A chest X-ray shows a suspicious density in the central portion of his right lung. Mr. Mueller is admitted to the hospital the following Monday for diagnostic tests.

ASSESSMENT

Anita Sarros, RN, admits Mr. Mueller to the oncology unit and obtains a nursing history. Mr. Mueller is married and has three grown children. He worked in a local paper mill for 35 years before retiring at age 62. He describes himself as “pretty healthy,” except for a chronic smoker’s cough. He started smoking as a young man in the army. He has a 50 pack-year smoking history, having smoked a pack a day for 50 years, since age 18. Mr. Mueller says he briefly quit smoking following a small heart attack 3 years ago, but started again after 4 months. On further questioning, Mr. Mueller says his cough has been productive for the past few months, especially in the morning, and that he is shorter of breath than usual with activity.

Mr. Mueller’s examination data includes BP 162/86, P 78 and regular, R 20, and T 98.4°F (36.9 C). Color good, skin warm and dry. Inspiratory and expiratory wheezes noted in right chest but good breath sounds throughout. No other abnormal findings are noted on examination. The physician orders early-morning sputum specimens times 3 days for cytologic examination and schedules a CT scan of the chest the morning after admission.

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Mr. Mueller’s CBC shows mild anemia, but remaining routine laboratory tests are essentially normal. Sputum cytology is positive for small-cell bronchogenic cancer. The CT scan shows a central mass approximately 4 cm in diameter with involved mediastinal and subclavicular lymph nodes. A small mass is also noted on the lumbar spine. After conferring with his physician and an oncologist, Mr. Mueller decides to undergo a trial course of chemotherapy.

DIAGNOSIS

Ms. Sarros develops the following nursing diagnoses for Mr. Mueller.

- Ineffective airway clearance related to tumor mass
- Risk for imbalanced nutrition: Less than body requirements related to effects of chemotherapy
- Risk for compromised family coping related to new diagnosis of lung cancer
- Deficient knowledge about lung cancer and aids to smoking cessation

EXPECTED OUTCOMES

The expected outcomes for the plan of care specify that Mr. Mueller and/or his family will:

- Maintain a patent airway.
- Maintain current weight.
- Express feelings and concerns about the effect of cancer on the family unit.
- Participate in care.
- Contact appropriate support groups.
- Verbalize an understanding of the disease, its treatment, and prognosis.
- Develop a plan to stop smoking.

PLANNING AND IMPLEMENTATION

Ms. Sarros plans and implements the following interventions.

- Teach coughing, deep breathing, and hydration measures to facilitate airway clearance.
- Discuss symptoms to report to the physician: increased dyspnea or hemoptysis, severe stridor or wheezing, chest pain.
- Discuss measures to relieve nausea associated with chemotherapy, including premedication with a prescribed antiemetic.
- Have dietician consult with Mr. and Mrs. Mueller to develop a diet plan for maintaining ideal weight.

(continued)
The pleura is a thin membrane with two layers: the visceral pleura, which overlies the lung surface, and the parietal pleura, which lines the inner chest wall. Between the layers of pleura is the pleural cavity, which contains a thin layer of serous fluid. As the thoracic cavity expands during inspiration, the pressure in this space becomes negative in relation to atmospheric pressure. The expansible lung is drawn into the pleural cavity, restricting lung expansion and air movement.

**Pleuritis**

Pleuritis, or inflammation of the pleura, irritates sensory fibers of the parietal pleura, causing characteristic pain. Pleural inflammation usually occurs secondarily to another process, such as a viral respiratory illness, pneumonia, or rib injury.

The onset of pleuritis is typically abrupt. The pain is unilateral and well localized; it is usually sharp or stabbing in nature. Pain may be referred to the neck or the shoulder. Deep breathing, coughing, and movement aggravate the pain. Respirations are rapid and shallow, and chest wall movement is limited on the affected side. Breath sounds are diminished, and a pleural friction rub may be heard over the site.

The diagnosis of pleuritis is based on its manifestations. Chest X-ray and ECG may be ordered to rule out other causes of chest pain. Treatment for pleuritis is symptomatic. Analgesics and NSAIDs, indomethacin (Indocin) in particular, help relieve the pain. Codeine may be ordered, both to relieve pain and to suppress the cough.

Nursing care for the client with pleuritis is directed toward promoting comfort, including administration of NSAIDs and analgesics. Positioning and splinting the chest while coughing also are helpful. Although wrapping the chest with 6-inch-wide elastic bandages may help relieve pain, this may excessively restrict chest motion, increasing the risk of impaired airway clearance.

Teach the client and family that pleuritis is generally self-limited and of short duration. Discuss symptoms to report to the physician: increased fever, productive cough, difficulty breathing, or shortness of breath. Provide information about prescription and nonprescription NSAIDs and analgesics, including the drug ordered, how to use it, and its desired and possible adverse effects.