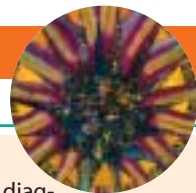


Nursing Care Plan

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.

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:

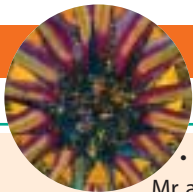
- Maintain a patent airway.
- Maintain current weight.
- Express feelings and concerns about the effect of cancer on the family unit.
- Participate in care.
- Contact appropriate support groups.
- Verbalize an understanding of the disease, its treatment, and prognosis.
- Develop a plan to stop smoking.

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 dietitian consult with Mr. and Mrs. Mueller to develop a diet plan for maintaining ideal weight.

(continued)



Nursing Care Plan

A Client with Lung Cancer *(continued)*

- Discuss possible effects of lung cancer with Mr. and Mrs. Mueller.
- Encourage Mr. and Mrs. Mueller to call a family conference to discuss the disease with their children and grandchildren.
- Evaluate family members' knowledge and understanding of lung cancer, correcting misinformation and teaching as needed.
- Have an American Cancer Society volunteer contact the family.
- Refer to local cancer support group.
- Refer to home health department for follow-up and further teaching.
- Work with Mr. Mueller to develop a plan to stop smoking.
- Ask the physician for a prescription for nicotine patches or gum for Mr. Mueller.

EVALUATION

Mr. Mueller had his first chemotherapy treatment in the hospital and was discharged 4 days after admission. After 3 months of chemotherapy, his tumor shows little regression, and a liver scan reveals further metastasis. He and his wife decide to stop

chemotherapy, a decision with which the children reluctantly agree. Mr. and Mrs. Mueller are referred to hospice services. With the help of hospice nurses and volunteers, Mr. Mueller is able to remain at home. His pain is managed initially with oral MS Contin, a sustained-release form of morphine sulfate, and later with an intravenous morphine infusion. Mr. Mueller dies at home with his family at his side 9 months after his diagnosis of lung cancer.

Critical Thinking in the Nursing Process

1. The oncologist prescribed a chemotherapy regimen of cyclophosphamide, doxorubicin, and vincristine. Describe how each of these drugs works against cancer cells, and discuss the rationale for using this combination.
2. Develop a care plan to deal with the specific side effects for the above treatment regimen.
3. Mr. Mueller had small-cell (oat cell) cancer. How would his presentation and treatment differ if the diagnosis had been non-small-cell adenocarcinoma, stage T₂N₂M₀?

See Critical Thinking in the Nursing Process in Appendix C.