

N344 Synthesis project

Lung Cancer Learning Guide

Loveneet Boyal, Cherry Cheng, & Sarena Narsing

Project & Team



Common cancer sites: Basics and nursing management resources for nurses working in oncology

- **Loveneet Boyal, Cherry Cheng & Sarena Narsing**
- **BC Cancer Agency Leaders: Anne Hughes & Ava Hatcher**
- **BCCA Vancouver contact: Esther Chow**

Project Background

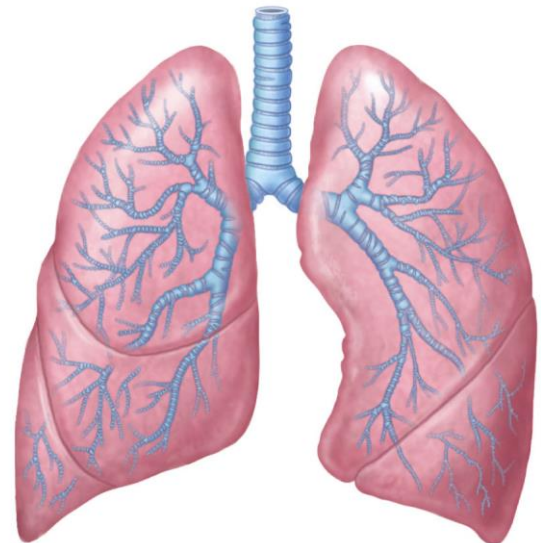
BC Cancer Agency nursing leaders have identified that staff nurses would benefit from an educational resource that reviews the basics of the most common cancer sites as well as the appropriate related nursing interventions, in order to increase their knowledge about the different cancer sites.

- This project aims to develop such an educational resource.



Purpose and Project Goals

- Develop a case scenario based learning module for Lung Cancer for RN's new to oncology
- Plan and coordinate the review process with expert colleagues



Overview

- Researched Lung Cancer patho-physiology, epidemiology, risk factors, diagnosis, and treatments
- Chart Reviews at the BC Cancer Agency
- Developed a case scenario and questions
- Provided resources for appropriate nursing interventions and care
- Created, formatted and edited module
- Consulted with BC Cancer Agency leaders



Resources

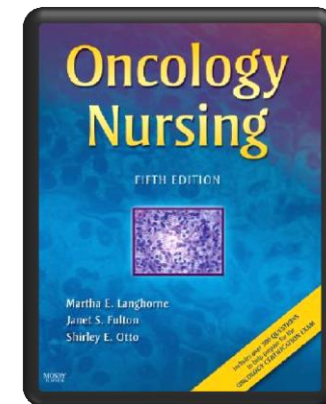
- Oncology Nursing textbook
- BC Cancer Agency website & protocols
- Peer-reviewed articles
- Patient archives
- Esther Chow, RN MScN CON(C)
 - Education Resource Nurse, BCCA
- Anne Hughes, RN BSN MN CON(C)
 - Professional Practice Leader, BCCA
- Ava Hatcher, RN BN CON(C)
 - Education Research Nurse, BCCA



BC Cancer Agency

CARE + RESEARCH

An agency of the Provincial Health Services Authority



Outcomes and Deliverables



- Section 2: Introduction to Lung Cancer & Case Study
 - Milestones, treatment trajectory, diagnostic processes, & differentiation between the two main types of lung cancer
- Section 3: Lung Cancer Treatments
 - Treatments, possible complications, & patient/family education
- Section 4: Lung Cancer Disease Progression and Palliation
 - Supporting the patient and family during palliation
- Section 5: Lung Cancer & Psychosocial Issues
 - Stigma, shame and guilt

By using a common case study for lung cancer, the learning guide is an easy to use tool that aims to help RN's new to oncology become more familiar with the complexities involved when caring for patients with lung cancer

Section 2: Introduction to Lung Cancer and the Case Study

Learning Objectives:

- Describe the milestones of Lung Cancer and the treatment trajectory
- Explain the diagnostic process of Lung Cancer
- Identify and differentiate between the two types of Lung Cancer

Lung Cancer

Lung Cancer is the most common cancer in the world, and second most common in Canada, irrespective of gender; it also accounts for 29% of all cancer deaths (Hoffman & Gift, 2007). The 5 year survival rate for all stages of lung cancer is 15% (cite text), often due to extensive disease progression and metastasis at the time of diagnosis. There are two main types of Lung Cancer, non-small cell lung cancer (NSCLC) and small cell lung cancer (SCLC). The most common form is NSCLC, accounting for approximately 80% of all Lung Cancer cases, whereas SCLC accounts for 20% (Hoffman & Gift, 2007). Please refer to table 2 for details regarding their characteristics.

"Lung Cancer is one of the few cancers that are known to result from specific carcinogens" (Hoffman & Gift, 2007, pg. 258). Evidence indicates there are certain carcinogens that cause genetic damage resulting in Lung Cancer. It is important to note that the cause of Lung Cancer is multi factorial and includes not only genetic risk factors, such as inherited susceptibility (Cite BCCA website), but also environmental factors including smoking, occupational hazards, indoor/outdoor air quality, and exposure to toxins (Refer to the textbook for more details). Smoking is one of the most lethal risk factors, in British Columbia, 85-90% of all Lung Cancers have been associated with smoking (Cite BCCA website).

The role of a nurse caring for a patient with Lung Cancer is to be as supportive as possible through sympathetic listening and providing practical symptom relief. A nurse should also take proactive actions to minimize risk factors where possible; for example, providing smoking cessation resources for clients who are actively smoking, or helping to identify any environmental toxins affecting the client. It is important for nurses to be knowledgeable of the risk factors and etiology of Lung Cancer in order to minimize risks, have a better understanding of the disease process, and provide patient education.

The table below highlights and summarizes a common Lung Cancer trajectory including diagnosis, treatment, and surveillance & follow-up.

Section 3: Lung Cancer Treatments

[case continued]

Mr. Smith is beginning his chemotherapy for four cycles with gemcitabine and carboplatin. He is also receiving radiation therapy to his spine at L1 and L3 with 6MV, dose 8Gy in one fraction. Mr. Smith is referred to the pain and symptom management team for his severe back pain. He is prescribed hydromorphone and tylenol 3's, but Mr. Smith is experiencing severe constipation. With these treatment modalities, Mr. Smith experiences nausea and vomiting, which he sometimes is unable to take his oral pain medication. He also experiences a lack of appetite, extreme fatigue, skin redness to his back, insomnia and worsened depression.

Since his wife, Mrs. Smith, is unemployed, she spends most of her time taking care of Mr. Smith including planning and attending his appointments. Mrs. Smith is very exhausted and worried that she is unable to take care of Mr. Smith herself.

What possible issues do you anticipate Mr. Smith will experience from the treatments?

As a nurse, what are some nursing interventions that would help Mr. Smith with his condition right now?

In terms of patient and family education, what information and resources would you provide for them?

Resources:

Read Nursing Management for NSCLC on pages 268-269 of the textbook.

Visit BCCA's website "Lung" under "Patient/Public Info" for general treatment modalities.

<http://www.bccancer.bc.ca/PPI/TypesofCancer/Lung/default.htm>

Visit BCCA's website "References/ Guidelines" for specific nursing management guidelines for different symptoms.

<http://www.bccancer.bc.ca/HPI/Nursing/References/default.htm>

Section 4: Lung Cancer Disease Progression and Palliation

[case continued]

Mr. Smith is unresponsive to the radiation therapy and continues to complain about severe back pain. CT scan reveals several new lesions at T4, T6, and T11, which put him at risk for cord compression. He current ECOG has gone down to 3 and uses a wheelchair to ambulate due to the back pain and increased shortness of breath on exertion. He needs home oxygen supplement as his O2 Sat has gone down to 86% during the six-minute walk test.

Mr. Smith starts to notice tingling and numbness on both of his hands. The doctor orders a brain scan, which reveals brain metastases at more than five areas of the brain. He is now being treated with whole brain radiation therapy, which increases his poor appetite, fatigue and nausea.

Mr. Smith has lost 20 lbs within the last 2 months. The pain and symptom management team is closely monitoring and controlling Mr. Smith's pain level throughout his course of disease. The doctor has initiated a discussion with Mr. Smith and his family about end-of-life care. Mr. Smith and his family feel extremely overwhelmed and disappointed by the disease progression. They are having a hard time accepting Mr. Smith's current condition.

How would you provide physical and psychological care for Mr. Smith and his family at this point?

What are some resources that can be provided to the patient and his family?

Resources:

Visit BCCA's Website "Psychosocial Oncology" under "Health Professional Info".
<http://www.bccancer.bc.ca/HPI/psychosocial/Psychosocial+Oncology.htm>

Section 5: Lung Cancer and Psychosocial Issues

[case continued]

During one of Kevin Smith's appointments his mood appears to be downcast compared to other visits, plus he makes a comment expressing worry for his son, that he is in danger of the same illness because he knows his son smokes occasionally. Mr. Smith also mentions that he, himself "should have known better," and regrets not quitting smoking earlier.

Kevin seems to be experiencing self-blame and guilt regarding his illness, given his previous history, what do these feelings put him at risk for, and how can it affect his illness? How would you respond to Kevin's concerns and how could you support him?

Actual and perceived lung cancer stigma can significantly impact the way an individual views and copes with their illness. How could you, as a healthcare provider, help to reduce lung cancer stigma?

Resources:

For patient resources t: "Coping with Cancer" on the BCCA website & Canadian Cancer Society website - "Support and Services"
<http://www.bccancer.bc.ca/PPI/copingwithcancer/default.htm>
<http://www.cancer.ca/en/support-and-services/support-services/how-we-can-help/?region=ns>

Global perceptions of Lung Cancer (Lung Cancer Canada)
<http://www.lungcancer canada.ca/global-perceptions.aspx>

Please refer to the following research for more information:

Cataldo, J.K., Jahan, T.M., & Pongquan, V.L. (2012). Lung cancer stigma, depression, and quality of life among ever and never smokers. *Eur J Oncol Nurs*, 16:3, 264-269. doi:10.1016/j.ejon.2011.06.008

Gonzalez, B.D. & Jacobsen, P.B. (2012). Depression in lung cancer patients: The role of perceived stigma. *Psycho-Oncology*, 21: 239-246. doi:10.1002/pon.1882

Refsgaard, B. & Frederiksen, K. (2013). Illness-related emotional experiences of patients living with incurable lung cancer: A qualitative metasynthesis. *Cancer Nursing*, 36:3, 221-228. doi:10.1097/NCC.0b013e318268f983.