

**NURSING – LOWER LOBE LUNG CARCINOMA**

SAMPLE

## Table of Contents

1. Introduction:.....	<b>Error! Bookmark not defined.</b>
2. Smoking and cancer – factsheet.....	<b>Error! Bookmark not defined.</b>
3. Lower lobe lung carcinoma .....	<b>Error! Bookmark not defined.</b>
4. Importance of nursing assessment .....	<b>Error! Bookmark not defined.</b>
5. General post operative care and managemnt: nursing priorities and interventions.....	<b>Error! Bookmark not defined.</b>
6. Patient education and recommendations.....	<b>Error! Bookmark not defined.</b>
7. Bibliography.....	<b>Error! Bookmark not defined.</b>

SAMPLE

## **INTRODUCTION**

It takes long to develop the dreadful disease, Lung Carcinoma. Where as the changes start taking place immediately after the beginning of consumption of carcinogenic components. The lining of the bronchi immediately start reacting to these components and abnormal growth starts taking place. With the increase in the exposure to the carcinogenic chemicals, the lining starts showing abnormal growth. The leading cause for the same always remained cigarette smoking.

## **SMOKING AND CANCER FACTSHEET**

The first thing which clicks when one hears of Lung Carcinoma is Smoking. To the scientific grounds too, smoking is considered to be the prime cause of Lung Cancer. The data says lung cancer due to smoking is the prime cause of death amongst 80 % of women and 90% of men in the world. A few facts are listed below highlighting the well knit relation between Smoking and Lung carcinoma.(U.S. Department of Health and Human Services, 2004)

- Lung Cancer is the first disease associated with smoking and is the second leading cause of death amongst such cases.
- Cigarette is the prime choice amongst the smokers.
- Smoking is responsible for causing approximately 80% of deaths amongst the female smokers and 90% of deaths amongst the male smokers.
- The cancer causing agents present in the tobacco and cigarettes are responsible for the mutation of genes that are responsible for growth and reproduction.
- The consequences turn even dreadful when smoking is accompanied by alcohol consumption. The simultaneous consumption of alcohol and smoking is the prime cause of laryngeal cancer. Approximately 4000 deaths occurred because of laryngeal cancer in 2008 in United States.
- Men who smoke one packet of cigarette in a day have risk almost ten times to the men who do not smoke.
- For the cancers associated with smoking, the risk of death is directly proportion to the number of cigarettes consumed per day. Also it is directly proportional to the

cigarette consumption for the number of years. The interesting fact here is the risk decreases immediately after quitting smoking.

- Ten years after quitting the smoking the risk of lung cancer drops to almost one third to the one half of the people who continue to smoke.
- Quitting smoking also reduces the risk of other related diseases like Emphysema, Heart Disease, stroke and Chronic bronchitis.
- Cigarette Smoking is the leading cause for benzene exposure which is the most harmful component of cigarette.
- Cigarette smoking has a potential to develop other cancers too like, stomach cancer, pancreatic cancer, kidney cancer, cervical cancer and acute myeloid leukemia.

## **LOWER LOBE LUNG CARCINOMA**

Lung Cancer can be primary in origin or it can be secondary metastatic spread from other sources.

- a. Pathophysiology: The classification of Lung cancer is done according to basic cells type. This carcinoma keeps high potential for metastasis and infiltrates the lung parenchyma.
- b. Common Presenting Symptoms: The most common symptoms are a persistent cough of long duration accompanied by haemoptysis (sputum with blood), pain in the chest, breathlessness, difficulty in swallowing, increased thirst, intermittent abdominal pain, hormonal imbalance and hoarseness. There may also present pain in the bones, loss in weight, anaemia, distraction behavior (restlessness and withdrawal), glucose in urine and general malaise. The patient usually gives an unwell and sickly appearance.
- c. Medical Management:

### Investigations

A strong history of smoking and a general unwell appearance along with the above mentioned symptoms gives a strong head start to suspect one with Lung Carcinoma. The diagnosis is confirmed by auscultation, chest X-Ray, CT scan (chest), Positron emission Tomography and Sputum Cytology. A fiberoptic

bronchoscopy can confirm the diagnosis. Biopsy sample is taken through the bioscope and is sent to the pathology laboratory.

To confirm the metastasis CT abdomen, CT Brain and Bone Scan are also recommended.

Routine CBC, Kidney Function Test, Liver Function Test, Pulmonary Function Test and Cardiac assessment are also recommended.(S. G. Mentsoudis, Nov 1, 2006)

## **IMPORTANCE OF NURSING ASSESSMENT**

Nursing assessment is the first stage when the nursing staff needs to assess the physiological, physical and emotional needs of the patient regardless any treatment model. The objective of the nursing assessment is to identify the patient's nursing needs and rectify them with immediate intervention.

The various components of the nursing assessment are

- Nursing History(Mannitoba, 2006)
- Physical Examination
- Physiological Examination
- Social examination

The nursing history is required before starting any examination to build up a rapport with the patient and the family and to develop the patient's confidence into the treatment. It also helps the nursing staff to know the background of the patient along with his/her expected response towards the patient.

The nursing history is followed by the physical examination which includes the observation and the measurement of signs and symptoms. The various methods used are Auscultation, Palpation, Percussion, Measurement of the vitals like temperature, blood pressure, oxygen saturation, pulse, colour of skin and general well being.(Sweethaven, 2006)

The physiological and social health examination involves the emotional and intellectual component of the patient's well being which helps to assess the patient's orientation towards the treatment.

The most important part here is to record the nursing assessment in the form of documentation for future reference. This documentation of nursing assessment is known as the Nursing Records.

The nursing assessment required after the surgery (post operative Lobectomy) includes the below mentioned measures.(Nettina, 2009)

- The nursing assessment of Respiratory rate and Respiratory depth
- The nursing assessment of skin color (to disclude Hypoxia)
- Assessment of Oxygen saturation with a Pulse Oxymeter
- Assessment of Pain
- Assessment of the wounds and the drainages attached to the wound
- Assessment of patency, leaks, quantity and the quality of drainage from the wounds
- Assessment of temperature and pulse
- Assessment if the patient is able to cough or swallow
- Assessment and monitoring of ECG
- Assessment of Non Invasive Blood Pressure(Janis P. Bellack)

### **GENERAL POST OPERATIVE CARE AND MANAGEMNT: NURSING PRIORITIES AND INTERVENTIONS (Gulanick, 2009)**

Nursing Priorities (Cameron D. Wright)

- Control or Alleviate Pain
- Maintain/Improve the respiratory function
- Reassure the patient and the family regarding the improvement
- Educate about the disease, prognosis and the therapeutic regime
- Extend full support to manage the disease/situation
- Monitor the records and patient's response towards the treatment

- Thorough record keeping

### Nursing Diagnosis

The patient after being shifted from Post Anaesthesia Recovery Room/ Intensive care unit requires vigilant monitoring and care by the nursing staff. The nursing staff may experience various mentioned situations/complications to handle post Lobectomy which require immediate intervention, quick decision, alert action and smart referrals (if required). The base of nursing diagnosis is formed by the signs and symptoms being experienced and shown by the patient on the spot and not on their medical diagnosis.

- Ineffective or abnormal breathing patterns which may arise due to excessive pain (local or general), incision, anxiety or general weakness
- Acute pain with or without anxiety and restlessness
- Ineffective coughing which may arise due to pain at site and leads to accumulation of secretions in throat which further aggravates the cough
- Due to mediastinal shift, there always remains a risk for impaired gas exchange, This is alarming and requires quick intervention.
- Impaired mobility of the limbs of the side operated.
- In relation to the chest tube drainage, there is always the risk for deficient fluid volume

### Nursing Interventions

The objective of nursing intervention post surgery is to enhance the outcome of the surgery by timely and effective care, guidance and management of the situation.

- The primary purpose of the nursing intervention is to restore the normal breathing pattern which must be visible through the patient's normal skin colour.
- To bring the patient's breathing to normal; the nursing staff should immediately put him/her in the High Fowler's position so that the patient can breathe normally

and cough at ease. This is to ensure that the site does not stretch much while he/she coughs.

- The nursing staff should also try to put the patient on his/her back as to help his/her lungs expand to their fullest.
- The attempt should be to keep the patient's airways open and to achieve this the patient can be administered with the humidified oxygen to help his/her secretions loosen followed by their suction.(K. Yoshimoto, January 2010)
- The nursing staff should review the effects and the side – effects of the medicines, antibiotics or drugs being consumed by the patient as to suggest the immediate alternative if required.

### Specific Considerations

The mentioned points are of high importance during the post operative management of Lobectomy.

- Nursing staff needs to be highly supportive during post operative chest physiotherapy. They need to ensure the continuity of the breathing exercises to the patient prescribed and demonstrated by the physiotherapist.
- Chest surgery can be dreadful the patient and his/ her assistances hence the nursing staff needs to reassure them while providing them with all the required assistance.
- Following the lower Lobectomy, the patient must be nursed in a semi-upright position, well supported by the pillows. It would help the patient to get the full expansion of the operated lung.
- The nursing staff also needs to monitor the equipment of the Oxygen therapy (if prescribed by the doctor). The amount of oxygen being given and the patient's response to the therapy are required to be monitored constantly and recorded for future references.
- Utmost care is required to be taken by the nursing staff for the drains as to keep them in place.(G. Varela, 2009)



- The patient's emotional and mental well being is an area which is neglected in majority of the cases and is under shadowed by the physical symptoms. The nursing staff is equally responsible to take patient's emotional needs to keep his/her morale high.

### Discharge Goals

- When ventilation is adequate to meet the patient's needs
- Pain is strictly under control
- Case is stable and free from suspected complications
- Patient and the family understands the disease process, prognosis and therapeutic lines
- Anxiety and fear are under control

### **PATIENT EDUCATION AND RECOMMENDATIONS**

- The nursing staff needs to explain to the patient the benefits of quitting smoking. She needs to develop a confidence in the patient explaining the process scientifically and also building up the patient's morale. The nursing staff needs to tell that the Atelactasis and accumulation of secretions in the lungs would decrease if the patient quits smoking thereby giving wound bright chances to heal fast.
- A strong will power needs to be build up to get convinced enough to quit smoking. Hence it is an imperative for the nursing staff to communicate well with the patient, motivate him/her. His moral level should be build up to a level which helps him/her to get rid of this dreadful addiction.
- Of course the family and friends also play a crucial role hence the nursing staff also needs to communicate to the family members so that they should provide the patient a healthy (stress free) environment at home.
- The patient also needs to be educated about the effective and correct method to cough to get rid of the secretions as to minimize the disturbance to the incision.
- Patient needs to be thoroughly educated with the physiotherapy and diaphragmatic breathing exercises.

- Patient and his/her attendants should be thoroughly trained to take care of the incision, regular bandage, follow ups, general hygiene and the wound's care.
- Nursing staff also need to explain to the patient and his family to avoid direct contact with dust and to keep the nose and mouth covered with mask as to avoid cross infection.
- Patient and his family needs to be explained the role of high protein rich diet which shall help building up the new cell fast. A thorough diet plan should be explained by the nursing staff before the discharge.
- Patient also needs to be instructed to consume freshly prepared home made food and to avoid recooked, reheated and street food. It shall help him to keep the cross infection at bay and at the same time healthy food shall fulfill the body's extra requirements.
- Also the patient needs to be explained to keep the non vegetarian food at bay.
- Patient can be asked to join the rehabilitation camp which can help him build positive attitude towards life and quit smoking easily.
- The patient should be educated about his sleep requirements for a speedy recovery. He can also be explained with the importance of tranquility and mental & emotional well being. It shall also help him get rid of his/her anxieties which in turn shall help him get rid of smoking.
- It should be communicated to the patient that smoking is an anti-social activity. It should not only be avoided at home but also at public places and in social context.
- Nursing staff should help the patient to develop a Quit Smoking Action Plan. Together they should list down all the issues encountering as obstacle and a detailed discussion on how to remove them.
- The patient should be encouraged to keep himself/herself engaged in the healthy and positive activities such as reading good and interesting books, delving in healthy family games, social activities, keeping away from stress and the aggravating factors.
- Patient should also be educated on the financial burden this dreadful addiction puts on his/her family. He should be taught with the constructive ways to engage his emotions.

- The patient should be given a complete guideline on how and when to resume with the normal activities. Also should be talked about a healthy lifestyle which can help him/her revive the life to whatever extent possible.
- The patient should also be explained with the affects if he/she still insists on continuing with the smoking. He can be explained the details of Chemotherapy and its aftereffects.
- An emergency guide should be appended at the time of discharge which should contain the complete information on how to manage the emergency situations (if arise) and complications (expected and unexpected).
- Passive smoking is equally injurious to health. For the patients who are recovering from the lung surgery it becomes imperative to ask for Non- Smoke environment at home, work and social places.

## REFERENCES

- Cameron D. Wright, M. J. (n.d.). *Pulmonary Lobectomy Patient Care Pathway*.
- G. Varela, M. F. (2009). *Postoperative chest tube management*.
- Gulanick, M. (2009). *Nursing care Plans: Nursing Diagnosis and Intervention*.
- Janis P. Bellack, B. E. (n.d.). *Nursing Assessment and Diagnosis*.
- K. Yoshimoto, H. N. (January 2010). *Postoperative change in pulmonary function of the ipsilateral preserved lung after segmentectomy versus lobectomy*.
- Mannitoba, U. o. (2006). *Physical assessment of the well women*. mannitoba.
- Nettina, S. M. (2009). *Lippincott Manual of Nursing Practice*.
- S. G. Memtsoudis, M. C. (Nov 1, 2006). *Trends in lung surgery*.
- Sweethaven. (2006). *"Components of a physical assessment"*.
- U.S. Department of Health and Human Services, C. f. (2004). *The health consequences of Smoking*. United States.