Nursing Care in the Prevention of Respiratory Complications

By

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As every nurse knows, respiratory complications occur too frequently following surgery, and when patients are confined to the bed for a long time. Bronchitis, atelectasis and pneumonia are the most common ones. These complications extend the patient's illness unnecessarily and may result in his death. Good nursing care can help prevent these complications.

Prevention

For the surgical patient, prevention begins before surgery. The nurse must help him to understand what is going to take place following surgery, and what he will be expected to do. She must help him to understand the importance of doing deep breathing exercises, productive coughing, turning and early ambulation. She must help him understand why these things will help him. When the patient knows what to expect following surgery, he will be more co-operative. Those patients who are confined to the bed for a long time need to understand the importance of these preventive measures also.

Deep Breathing Exercises

In the pre-operative period, the nurse should instruct the patient how to breathe deeply. It is necessary that he should breathe slowly and expand the lungs fully. While lying flat, he should practise pulling in his abdominal muscles as he takes a deep breath. This enables the diaphragm to descend fully and the entire lung to expand. If bronchial secretions are present, deep breathing will stimulate coughing and the production of mucus. The patient should practise this exercise and understand that he is to do this about every two hours following surgery. This exercise should be done frequently by the patient who is on extended bed rest.

Productive Coughing Exercises

Productive coughing may be stimulated by the deep breathing exercises, however, the nurse will teach the patient how to cough productively before surgery. She instructs the patient to lie flat with his hands on his abdomen. He should take a deep breath and tighten his abdominal muscles (which lowers the diaphragm) and should force himself to cough. If he does this correctly, he can feel his abdominal muscles tighten and the abdomen rise. After surgery, the patient will do this exercise every two hours under the supervision of the nurse. Coughing is necessary to free the mucus in the bronchi and allow the lungs to expand fully.

Both the deep breathing and coughing exercises may cause pain and discomfort. The nurse must help the patient to understand that she can assist him by holding her hands firmly on either side of his incision. This "Splints" his incision and helps to minimise pain. If the patient understands these things before surgery, he will have less fear and be more co-operative in the post-operative period.

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