

PROTOCOL FOR: Head and Neck Procedures: Total Laryngectomy

SUPPORTIVE DATA: A total laryngectomy involves the removal of the entire larynx in patients with cancer too extensive for partial laryngectomy. During the procedure, the connection between the trachea and pharynx is severed, and the trachea is sutured to the skin of the neck forming a permanent tracheostomy (stoma). A neck dissection may also be performed in conjunction with a total laryngectomy.

DESIRED

- PATIENT OUTCOMES:
1. The patient will have minimal to no post-operative complications related to the total laryngectomy.
 2. The patient will demonstrate effective means of communication in the immediate post-operative period, and will begin to demonstrate effective communication skills with the use of an electrolarynx.
 3. The patient will have adequate pain control.
 4. The patient's nutritional status will be maintained or improved.
 5. The patient and family will verbalize concerns and begin to demonstrate acceptance of change in communication pattern and body image.
 6. The patient and family will verbalize understanding of the importance of stoma care, humidification and suctioning in maintaining airway patency and will begin to demonstrate independence in self-care/stoma care and suctioning.
 7. The patient and family will verbalize differentiation between nose/mouth vs. neck breathing and understanding of precautions for neck breathers and first aid for neck breathers.
 8. Prior to discharge, the patient and family will verbalize an understanding of the signs and symptoms of wound complications.
 9. The patient and family will be knowledgeable of community resources.

CLINICAL
ASSESSMENT

AND CARE:

- A. Respiratory Management
1. Assess airway patency and monitor for any signs or symptoms of respiratory distress.
 2. Maintain humidified oxygen via tracheal mask to keep secretions moist/loose which will allow secretions to clear from the tracheostomy and prevent plugging. When

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oxygen is no longer required, maintain the patient on humidified air via tracheal mask. Make sure that an adequate level of sterile water is maintained in the humidification system at all times.

3. Maintain a suction set-up at the patient's bedside with a Yankauer suction tip as well as #12 - #14 French long suction catheters.
4. Maintain the head of the bed at 30 degrees or higher.
5. Prevent hyperextension of the neck.
6. Suction via the stoma every two hours or as needed.
7. Assess the effectiveness of the patient's cough reflex to clear secretions.
8. Assess the secretions for color, quantity, consistency and odor.
9. Assess lung sounds every four hours for 24 hours and then every eight hours if stable, and prn.
10. Obtain oxygen saturation via pulse oximetry every four hours through post-op day 2, then every eight hours times three after the patient is weaned from oxygen to humidified air or as ordered by the physician.

B. Stoma Care

1. Assess wounds for signs of fistula, hematoma, hemorrhage, dehiscence, necrosis or infection.
2. As ordered, every eight hours, cleanse the incisions with a solution of half-strength hydrogen peroxide and normal saline followed by a normal saline rinse. Apply a light application of bacitracin ointment to incisions following wound care as ordered. Use cotton-tipped applicators or gauze when providing wound care.
3. Cleanse the stoma as per above wound care instructions every eight hours and as needed to maintain airway patency. Make sure the stoma and trachea are free of dried secretions.

C. General Post-Operative Management

1. Assess vital signs every four hours for 24 hours. Advance vital signs to every eight hours when stable.

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2. Assess the patient's pain level on a scale of zero to ten at least every four hours. Medicate as ordered for pain and assess the patient's response to analgesia.
3. Maintain drain to self-suction and monitor functioning of drainage system. Empty, measure and record drain output every 8 hours.
4. Assist the patient with mouth care every four hours and as needed using swabs and/or rinses.
5. Encourage the patient to be out of bed to the chair two times on post-operative day one; encourage ambulation with assistance as tolerated. On POD #2 and thereafter, the patient should be out of bed to the chair and ambulating three times per day (with assistance as needed).
6. Assess for signs of a fistula.
7. Notify the physician for:
 - a. signs or symptoms of respiratory distress.
 - b. signs of wound complication including fistula, hematoma, hemorrhage, dehiscence, necrosis or infection.
 - c. changes in baseline vital signs.
 - d. inadequate pain control.
 - e. problems with wound drainage system.
 - f. poor tolerance to diet or inadequate fluid intake.
 - g. signs of maladaptive coping.

D. Nutritional Support

1. Assess the patient's nutritional status per Protocol for: Nutrition, Altered: Less Than Body Requirements.
2. Administer tube feedings as ordered and assess the patient's toleration of tube feeding per Protocol for: Tube Feedings (Adult). Do not manipulate the nasogastric feeding tube if present.
3. Maintain a strict NPO status until p.o. feedings are ordered by the physician.
4. Advance the diet as ordered and assess the patient's response.
5. Consult with the dietitian and physician regarding specific nutritional needs.

E. Communication Needs

1. On POD #1, ascertain that speech therapy has been consulted.

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2. In the immediate post-operative period, assist the patient with communication by providing the patient with paper and pencil and/or a communication board with words, letters or pictures.
3. Once speech therapy has been initiated, consult with the speech therapist and patient to determine the patient's needs and progress.
4. Encourage the patient to utilize the electrolarynx when communicating with others.

F. Emotional Needs

1. Assess the patient's personal coping mechanisms as well as the presence of a support system.
2. Assess the patient's and family response to the diagnosis, treatment, and altered communication pattern and body image.
3. Encourage the patient and family to ask questions and to verbalize their concerns. Provide them with emotional support and rationales for interventions.
4. Encourage the patient to be independent with self-care needs and ambulation.
5. Encourage the patient and family to participate in wound care and stoma care and assess their response.
6. Encourage visitors and interaction with others.
7. Provide the patient with information regarding community resources i.e.: the American Cancer Society (Lost Cords Chapter) and laryngectomy supply companies.
8. Encourage the patient to participate in social activities (and work as appropriate) following discharge.

PATIENT EDUCATION: Stoma Care Teaching

1. Assess the patient's willingness to learn as well as his/her cognitive and physical abilities to learn and perform stoma care.
2. If possible, instruct one or more of the patient's family members in stoma management. Arrange times for teaching sessions in which family may be present.

Session I (Approximately the first post-operative day)

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1. Verbally explain to the patient the method of stoma care as it is being performed.
2. Explain the importance of stoma care, humidification and suctioning in maintaining airway patency.
3. Instruct the patient to notify the nurse immediately if suctioning is required.

Session II (Approximately the second post-operative day)

1. Assess the patient's readiness to visualize the stoma. If the patient is ready, provide him/her access to a mirror. Provide support and encourage questions.
2. Repeat Session I, but also allow the patient to visualize stoma care.
3. Instruct the patient to cough and raise secretions, and to clear the secretions from the stoma with the Yankauer suction tip and/or normal saline moistened gauze.

Session III (Approximately the third post-operative day)

1. Repeat Sessions I and II and evaluate the patient's and family's progress.
2. Explain the materials needed to perform stoma care: hydrogen peroxide, normal saline, cotton-tipped applicators and gauze sponges. Repeat sessions I and II and evaluate the patient's and significant other's progress.
3. Have the patient and family return-demonstrate cleansing of the stoma using cotton-tipped applicators or gauze sponges soaked in the solution of half-strength hydrogen peroxide and normal saline. Instruct the patient and family to remove the hydrogen peroxide with normal saline using either the cotton-tipped applicators or gauze sponges.
4. Encourage the patient to remove secretions expelled from the trachea with normal saline moistened gauze before the secretions become dried and more difficult to remove.
5. If a laryngectomy tube has been ordered to prevent contracture of the stoma, instruct in the removal and cleansing of the laryngectomy tube using half-strength hydrogen peroxide/normal saline solution followed by a normal saline rinse.
6. Explain that once the stoma incisions have healed and the sutures have been removed, that mild soap and water may be used to perform stoma and laryngectomy tube care.

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7. Provide instruction in the installation of a few drops of normal saline directly into the stoma. Explain that this may loosen secretions and stimulate a cough to clear dried secretions and moisten the tracheal mucosa should the dried secretions be difficult to expel.

Session IV (approximately the fourth post-operative day)

1. Repeat Sessions I, II and III and evaluate the patient's and family's progress.
2. Describe to the patient and family the rationale behind the need for life-long adequate humidification. Explain methods to maintain loose secretions such as humidified air via tracheal mask (required in the first several months following discharge), a large room humidifier, a bedside humidifier and adequate fluid intake.
3. Alert the patient to environmental changes (seasons, climates) that affect tracheal secretions.
4. Instruct the patient and family in the following secretion changes that may signify inadequate humidity: blood-tinged secretions, increase in thickness or tenacity of secretions or difficulty mobilizing secretions. Explain methods to relieve such as installation of normal saline or standing in a steam-filled bathroom for 15 minutes.
5. Instruct the patient to use caution when bathing to avoid aspiration. A tracheostomy shield, a shower head below the level of the neck or a removable shower head are recommended.
6. Instruct the patient to avoid all water sports.
7. Instruct the patient to wear an appropriate shield over the tracheostomy to avoid foreign body aspiration.
8. Encourage the patient to wear a bracelet or carry a wallet card identifying him/herself as a "laryngectomee" or "neck breather".
9. Instruct the patient and family in the signs and symptoms of infection and fistula.
10. As applicable, discourage smoking and/or heavy alcohol consumption. Provide the patient with information regarding community services as needed.

Repeat the content of the teaching sessions as needed on subsequent post-operative days. Have the patient and family return-demonstrate the instructions covered in the

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teaching sessions each time that stoma care is required. Remain with the patient and family during these teaching sessions as needed to answer questions and provide verbal cueing. Explain the rationale for all procedures.

DISCHARGE PLANNING:

1. Make sure the following home durable medical equipment is arranged for prior to discharge: a) suction equipment and supplies b) humidified oxygen or air.
2. Assess discharge needs and consult with the unit case manager to arrange for home care following discharge (i.e. stoma care education, tube feedings and speech therapy). Evaluate the patient's and family's progress with stoma care. If the patient and/or family are not independent with stoma care prior to discharge, consult with the patient, unit case manager and physicians to arrange for community services.
3. Recommend to the patient to purchase room humidifiers for home (i.e. living room, bedroom).
4. As needed, provide the patient with wound care supplies prior to discharge.
5. Consult with the physician and speech therapist regarding the need for speech therapy following discharge.

DOCUMENTATION: Patient and Family Teaching Record: Total Laryngectomy

APPROVAL: Nursing Standards Committee

EFFECTIVE DATE: 12/01

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