c. Shielding the stoma with a stoma guard, such as a gauze square on a tie around the neck, to prevent particulate matter from entering the lower respiratory tract.
d. Promptly removing secretions from skin surrounding the stoma to prevent irritation and skin breakdown.
e. Water sports are contraindicated with a permanent tracheostomy; there is no restriction on other activities although lifting may be more difficult because of inability to hold the breath (the Valsalva maneuver).
f. Showering and bathing (without submerging the neck or head) are allowed; protect the stoma with a cupped hand or washcloth.

- Manifestations of potential complications of laryngectomy to be reported to the physician, including loss of hearing or facial expression due to auditory or facial nerve injury, or shoulder drop due to damage to the spinal accessory nerve.

The client and family need emotional and motivational support through this trying time. Refer to local support groups such as a laryngectomy club or lost cord club. If the client and family are having difficulty adjusting to the diagnosis of cancer and the effects of treatment, provide referral to counseling.

**Nursing Care Plan**

**A Client with Total Laryngectomy**

David Tom is a 61-year-old accountant who is divorced and has two adult children. He has smoked two packs of cigarettes daily since high school, and usually has three or four cocktails each evening. After several months of persistent sore throat and hoarseness, Mr. Tom was diagnosed with cancer of the larynx. He has been admitted to the surgical care unit from the ICU 2 days post total laryngectomy.

**ASSESSMENT**

Mr. Tom's vital signs are stable: BP 146/84, P 92 and regular, R 18, T 98°F (36.7°C) axillary. A tracheostomy tube is sutured in place, and he is receiving humidified oxygen at 28% per tracheostomy collar. Pulse oximetry is 94%. He is receiving continuous tube feeding per nasogastric feeding tube. Two Hemovac wound drains are present in the right neck area. A moderate amount of edema is noted in the right facial and submandibular area. Mr. Tom is ambulatory within the room.

**DIAGNOSIS**

Dana Brown, RN, admits Mr. Tom to the unit and develops the following nursing diagnoses.

- Risk for ineffective airway clearance related to postoperative edema
- Risk for ineffective breathing pattern related to pain and anxiety
- Disturbed body image related to total laryngectomy and presence of tracheostomy stoma
- Impaired verbal communication related to total laryngectomy
- Pain related to surgical procedure
- Risk for imbalanced nutrition: Less than body requirements related to difficulty eating after surgery

**EXPECTED OUTCOMES**

The expected outcomes for the plan of care are that Mr. Tom will:

- Maintain clear airways and lung sounds.
- Maintain oxygen saturation level greater than 92%.
- Demonstrate interest in providing incision and stoma care.
- Accept information about potential communication strategies.
- Communicate effective pain management.

**PLANNING AND IMPLEMENTATION**

The following interventions are planned and implemented for Mr. Tom.

- Assess respiratory status including rate, pattern, lung sounds, and cough effectiveness at least every 4 hours.
- Monitor quantity, color, and odor of secretions.
- Assess vital signs and pain at least every 4 hours. Administer analgesics as ordered.
- Schedule time to sit with Mr. Tom and discuss his concerns and feelings at least three times per day.
- Provide written information as requested.
- Monitor intake, output, and daily weight.
- Arrange dietary consultation to determine caloric requirements.

**EVALUATION**

Mr. Tom reports in writing that his pain is adequately controlled. His respiratory status is stable with clear breath sounds throughout and an oxygen saturation of 94%. He is afebrile. Mr. Tom tolerating tube feedings well and expresses a desire to begin eating. The dietitian has visited and assisted in planning to begin oral feedings. Intake and output are stable, as is his weight. Mr. Tom has been receptive to receiving information about follow-up care and exploration of various modalities of speech.

**Critical Thinking in the Nursing Process**

1. Compare and contrast advantages and disadvantages of various methods to allow speech following total laryngectomy.
2. Develop a plan of care for Mr. Tom for the nursing diagnosis, Disturbed body image.
3. Discuss nursing interventions to provide wound care for the client with laryngectomy and radical neck dissection.
4. List strategies to optimize ventilation.

See Critical Thinking in the Nursing Process in Appendix C.