

RADICAL NECK SURGERY: LARYNGECTOMY (POSTOPERATIVE CARE)

Head and neck cancer refers to a malignancy that lies above the clavicle but excludes the brain, spinal cord, axial skeleton, and vertebrae. Although head and neck cancer accounts for 5% of all malignant disease, disability is great because of the potential loss of voice, disfigurement, and social consequences. The majority of the laryngeal neoplasms (95%) are squamous cell carcinomas that arise from the oral cavity. When cancer is limited to the vocal cords (intrinsic), spread may be slow. When the cancer involves the epiglottis (extrinsic), metastasis is more common. Current treatment choices include surgery, radiation, and chemotherapy. Radiation or carbon dioxide laser may be used for early stage disease. This plan of care focuses on nursing care of the patient undergoing radical surgery of the neck, including laryngectomy.

Partial laryngectomy (also called cordotomy): Tumors that are limited to one vocal cord are removed, and a temporary tracheotomy is performed to maintain the airway. After recovery from surgery, the patient will have a voice but it will be hoarse.

Hemilaryngectomy: When there is a possibility the cancer includes one true and one false vocal cord, they are removed along with an arytenoid cartilage and half of the thyroid cartilage. Temporary tracheotomy is performed, and the patient's voice will be hoarse after surgery.

Supraglottic laryngectomy: When the tumor is located in the epiglottis or false vocal cords, radical neck dissection is done and tracheotomy performed. The patient's voice remains intact; however, swallowing is more difficult because the epiglottis has been removed.

Total laryngectomy: Advanced cancers that involve a large portion of the larynx require removal of the entire larynx, the hyoid bone, the cricoid cartilage, two or three tracheal rings, and the strap muscles connected to the larynx. A permanent opening is created in the neck into the trachea, and a laryngectomy tube is inserted to keep the stoma open. The lower portion of the posterior pharynx is removed when the tumor extends beyond the epiglottis, with the remaining portion sutured to the esophagus after a nasogastric tube is inserted. The patient must breathe through a permanent tracheostomy, with normal speech no longer possible. Swallowing is not a long-term problem because there is no connection between the esophagus and trachea.

CARE SETTING

Inpatient surgical and possibly subacute units.

RELATED CONCERNS

Cancer

Psychosocial aspects of care

Surgical intervention

Total nutritional support: parenteral/enteral feeding

Patient Assessment Database (Preoperative)

Preoperative data presented here depend on the specific type/location of cancer process and underlying complications.

EGO INTEGRITY

- May report:** Feelings of fear about loss of voice, dying, occurrence/recurrence of cancer
Concern about how surgery will affect family relationships, ability to work, and finances
- May exhibit:** Anxiety, depression, anger, and withdrawal
Denial

FOOD/FLUID

- May report:** Difficulty swallowing (dysphagia)
- May exhibit:** Difficulty handling oral secretions, chokes easily
Swelling, ulcerations, masses may be noted depending on location of cancer
Oral inflammation/drainage, poor dental hygiene
Leukoplakia, erythroplasia of oral cavity
Halitosis
Swelling of tongue

Altered gag reflex and facial paralysis

HYGIENE

May exhibit: Neglect of dental hygiene
Need for assistance in basic care

NEUROSENSORY

May report: Diplopia (double vision)
Deafness
Tingling, paresthesia of facial muscles

May exhibit: Hemiparalysis of face (parotid and submandibular involvement), persistent hoarseness or loss of voice (dominant and earliest symptom of intrinsic laryngeal cancer)
Difficulty swallowing
Conduction deafness
Disruption of mucous membranes

PAIN/DISCOMFORT

May report: Chronic sore throat, “lump in throat”
Referred pain to ear, facial pain (late stage, probably metastatic)
Pain/burning sensation with swallowing (especially with hot liquids or citrus juices), local pain in oropharynx

(Postoperative) Sore throat or mouth (pain is not usually reported as severe following head and neck surgery, as compared with pain noted before surgery)

May exhibit: Guarding behaviors
Restlessness
Facial mask of pain
Alteration in muscle tone

RESPIRATION

May report: History of smoking (including cigars)/chewing tobacco
Occupation working with hardwood sawdust, toxic chemicals/fumes, heavy metals
History of voice overuse, e.g., professional singer or auctioneer
History of chronic lung disease
Cough with/without sputum
Bloody nasal drainage

May exhibit: Blood-tinged sputum, hemoptysis
Dyspnea (late)

SAFETY

May report: Excessive sun exposure over a period of years or radiation therapy
Visual/hearing changes

May exhibit: Masses/enlarged nodes

SOCIAL INTERACTION

May report: Lack of family/support system (may be result of age group or behaviors, e.g., alcoholism)
Concerns about ability to communicate, engage in social interactions

May exhibit: Persistent hoarseness, change in voice pitch
Muffled/garbled speech, reluctance to speak
Hesitancy/reluctance of significant others to provide care/be involved in rehabilitation

TEACHING/LEARNING

May report: Nonhealing of oral lesions
Concurrent use of alcohol/history of alcohol abuse

Discharge plan considerations: **DRG projected mean length of inpatient stay: 5.0–13.0 days**
Assistance with wound care, treatments, supplies; transportation, shopping; food preparation; self-care, homemaker/maintenance tasks
Refer to section at end of plan for postdischarge considerations.

DIAGNOSTIC STUDIES

Direct/indirect laryngoscopy; laryngeal tomography, biopsy, and needle biopsy: Are the most reliable diagnostic indicators for direct visualization or to detect local or regional spread/staging.

Laryngography: May be performed with contrast to study blood vessels and lymph nodes.

Pulmonary function studies, bone scans, or other organ scans: May be indicated if distant metastasis is suspected.

Chest x-ray: Done to establish baseline lung status and/or identify metastases.

CBC: May reveal anemia, which is a common problem.

Immunological surveys: May be done for patients receiving chemotherapy/immunotherapy.

Biochemical profile: Changes may occur in organ function as a result of cancer, metastasis, and therapies.

ABGs/pulse oximetry: May be done to establish baseline/monitor status of lungs (ventilation).

NURSING PRIORITIES

1. Maintain patent airway, adequate ventilation.
2. Assist patient in developing alternative communication methods.
3. Restore/maintain skin integrity.
4. Reestablish/maintain adequate nutrition.
5. Provide emotional support for acceptance of altered body image.
6. Provide information about disease process/prognosis and treatment.

DISCHARGE GOALS

1. Ventilation/oxygenation adequate for individual needs.
2. Communicating effectively.
3. Complications prevented/minimized.
4. Beginning to cope with change in body image.
5. Disease process/prognosis and therapeutic regimen understood.
6. Plan in place to meet needs after discharge.

**NURSING DIAGNOSIS: Airway Clearance, ineffective/Aspiration, risk for
May be related to**

Partial/total removal of the glottis, altering ability to breathe, cough, and swallow
Temporary or permanent change to neck breathing (dependent on patent stoma)
Edema formation (surgical manipulation and lymphatic accumulation)
Copious and thick secretions

Possibly evidenced by (Airway Clearance)

Dyspnea/difficulty breathing
Changes in rate/depth of respiration; use of accessory respiratory muscles
Abnormal breath sounds
Cyanosis

DESIRED OUTCOMES/EVALUATION CRITERIA—PATIENT WILL:

Respiratory Status: Airway Patency (NOC)

Maintain patent airway with breath sounds clear/clearing.
Expectorate/clear secretions and be free of aspiration.

Aspiration Control (NOC)

Demonstrate behaviors to improve/maintain airway clearance within level of ability/situation.

ACTIONS/INTERVENTIONS

RATIONALE

Airway Management (NIC)	
<p>Independent</p> <p>Monitor respiratory rate/depth; note ease of breathing. Auscultate breath sounds. Investigate restlessness, dyspnea, development of cyanosis.</p> <p>Elevate head of bed 30–45 degrees.</p> <p>Encourage swallowing, if patient is able.</p> <p>Encourage effective coughing and deep breathing.</p> <p>Suction laryngectomy/tracheostomy tube, oral and nasal cavities. Note amount, color, and consistency of secretions.</p> <p>Demonstrate and encourage patient to begin self-suction procedures as soon as possible. Educate patient in “clean” techniques.</p> <p>Maintain proper position of laryngectomy/tracheostomy tube. Check/adjust ties as indicated.</p> <p>Observe tissue surrounding tube for bleeding. Change patient’s position to check for pooling of blood behind neck or on posterior dressings.</p> <p>Change tube/inner cannula as indicated. Instruct patient in cleaning procedures.</p> <p>Collaborative</p> <p>Provide supplemental humidification, e.g., compressed air/oxygen mist collar, increased fluid intake.</p>	<p>Changes in respirations, use of accessory muscles, and/or presence of rhonchi/wheezes suggest retention of secretions. Airway obstruction (even partial) can lead to ineffective breathing patterns and impaired gas exchange, resulting in complications, e.g., pneumonia, respiratory arrest.</p> <p>Facilitates drainage of secretions, work of breathing, and lung expansion. <i>Note:</i> Increase elevation when oral intake is provided.</p> <p>Prevents pooling of oral secretions, reducing risk of aspiration. <i>Note:</i> Swallowing is impaired when the epiglottis is removed and/or significant postoperative edema and pain are present.</p> <p>Mobilizes secretions to clear airway, and helps prevent respiratory complications.</p> <p>Prevents secretions from obstructing airway, especially when swallowing ability is impaired and patient cannot blow nose. Changes in character of secretions may indicate developing problems (e.g., dehydration, infection) and need for further evaluation/treatment.</p> <p>Assists patient to exercise some control in postoperative care and prevention of complications. Reduces anxiety associated with difficulty in breathing or inability to handle secretions when alone.</p> <p>As edema develops/subsides, tube can be displaced, compromising airway. Ties should be snug but not constrictive to surrounding tissue or major blood vessels.</p> <p>Small amount of oozing may be present; however, continued bleeding or sudden eruption of uncontrolled hemorrhage presents a sudden and real possibility of airway obstruction/suffocation.</p> <p>Prevents accumulation of secretions and thick mucous plugs from obstructing airway. <i>Note:</i> This is a common cause of respiratory distress/arrest in later postoperative period.</p> <p>Normal physiological (nose/nasal passages) means of filtering/humidifying air are bypassed. Supplemental humidity decreases mucous crusting and facilitates coughing/suctioning of secretions through stoma.</p>
ACTIONS/INTERVENTIONS	RATIONALE

<p>Airway Management (NIC)</p> <p>Collaborative</p> <p>Resume oral intake with caution. (Refer to ND: Nutrition: imbalanced, less than body requirements.)</p> <p>Monitor serial ABGs/pulse oximetry; chest x-ray.</p>	<p>Changes in muscle mass/strength and nerve innervation increase likelihood of aspiration.</p> <p>Pooling of secretions/presence of atelectasis may lead to pneumonia, requiring more aggressive therapeutic measures.</p>
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<p>NURSING DIAGNOSIS: Communication, impaired verbal</p> <p>May be related to</p> <p>Anatomical deficit (removal of vocal cords)</p> <p>Physical barrier (tracheostomy tube)</p> <p>Required voice rest</p> <p>Possibly evidenced by</p> <p>Inability to speak</p> <p>Change in vocal characteristics</p> <p>DESIRED OUTCOMES/EVALUATION CRITERIA—PATIENT WILL:</p> <p>Communication Ability (NOC)</p> <p>Communicate needs in an effective manner.</p> <p>Identify/plan for appropriate alternative speech methods after healing.</p>

<p>ACTIONS/INTERVENTIONS</p> <p>Communication Enhancement: Speech Deficit (NIC)</p> <p>Independent</p> <p>Review preoperative instructions/discussion of why speech and breathing are altered, using anatomical drawings or models to assist in explanations.</p> <p>Determine whether patient has other communication impairments, e.g., hearing, vision, literacy.</p> <p>Provide immediate and continual means to summon nurse, e.g., call light/bell. Let patient know the summons will be answered immediately. Stop by to check on patient periodically without being summoned. Post notice at central answering system/nursing station that patient is unable to speak.</p>	<p>RATIONALE</p> <p>Reinforces teaching at a time when fear of surviving surgery is past.</p> <p>Presence of other problems influences plan for alternative communication.</p> <p>Patient needs assurance that nurse is vigilant and will respond to summons. Trust and self-esteem are fostered when the nurse cares enough to come at times other than when called by patient.</p>
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<p>ACTIONS/INTERVENTIONS</p> <p>Communication Enhancement: Speech Deficit (NIC)</p>	<p>RATIONALE</p>
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<p>Independent</p> <p>Prearrange signals for obtaining immediate help.</p> <p>Provide alternative means of communication appropriate to patient need, e.g., pad and pencil, magic slate, alphabet/picture board, sign language. Consider placement of IV.</p> <p>Allow sufficient time for communication.</p> <p>Provide nonverbal communication, e.g., touching and physical presence. Anticipate needs.</p> <p>Encourage ongoing communication with “outside world,” e.g., newspapers, television, radio, calendar, clock.</p> <p>Refer to loss of speech as temporary after a partial laryngectomy and/or depending on availability of voice prosthetics/vocal chord transplant.</p> <p>Caution patient not to use voice until physician gives permission.</p> <p>Arrange for meeting with other persons who have experienced this procedure, as appropriate.</p> <p>Collaborative</p> <p>Consult with appropriate health team members/therapists/rehabilitation agency (e.g., speech pathologist, social services, laryngectomee clubs) for hospital-based rehabilitation and community resources, such as Lost Chord/NewVoice Club, International Association of Laryngectomees, American Cancer Society.</p>	<p>May decrease patient’s anxiety about inability to speak.</p> <p>Permits patient to “express” needs/concerns. <i>Note:</i> IV positioned in hand/wrist may limit ability to write or sign.</p> <p>Loss of speech and stress of alternative communication can cause frustration and block expression, especially when caregivers seem “too busy” or preoccupied.</p> <p>Communicates concern and meets need for contact with others. Touch is believed to generate complex biochemical events, with possible release of endorphins contributing to reduction of anxiety.</p> <p>Maintains contact with “normal lifestyle” and continued communication through other avenues.</p> <p>Provides encouragement and hope for future with the thought that alternative means of communication and speech are available and possible.</p> <p>Promotes healing of vocal cord and limits potential for permanent cord dysfunction.</p> <p>Provides role model, enhancing motivation for problem solving and learning new ways to communicate.</p> <p>Ability to use alternative voice and speech methods (e.g., electrolarynx, tracheoesophageal puncture [TEP], voice prosthesis, esophageal speech) varies greatly, depending on extent of surgical procedures, patient’s age, emotional state, and motivation to return to an active life. Rehabilitation time may be lengthy and require a number of agencies/resources to facilitate/support learning process. <i>Note:</i> Some patients may be candidates for vocal cord transplant at a future date.</p>
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NURSING DIAGNOSIS: Skin/Tissue Integrity, impaired

May be related to

- Surgical removal of tissues/grafting
- Radiation or chemotherapeutic agents
- Altered circulation/reduced blood supply
- Compromised nutritional status
- Edema formation
- Pooling/continuous drainage of secretions (oral, lymph, or chyle)

Possibly evidenced by

- Disruption of skin/tissue surface
- Destruction of skin/tissue layers

DESIRED OUTCOMES/EVALUATION CRITERIA—PATIENT WILL:

Wound Healing: Primary Intention (NOC)

- Display timely wound healing without complications.
- Demonstrate techniques to promote healing/prevent complications.

ACTIONS/INTERVENTIONS	RATIONALE
<p>Skin Surveillance (NIC)</p> <p>Independent</p> <p>Assess skin color/temperature and capillary refill in operative and skin graft areas.</p> <p>Keep head of bed elevated 30–45 degrees. Monitor facial edema (usually peaks by third to fifth postoperative day).</p> <p>Protect skin flaps and suture lines from tension or pressure. Provide pillows/rolls and instruct patient to support head/neck during activity.</p> <p>Monitor bloody drainage from surgical sites, suture lines, drains. Measure drainage from hemovac device (if used).</p> <p>Note/report any milky-appearing drainage.</p> <p>Wound Care (NIC)</p> <p>Change dressings as indicated.</p>	<p>Skin should be pink or similar to color of surrounding skin. Skin graft flaps should be pink and warm and should blanch (when gentle finger pressure is applied), with return to color within seconds. Cyanosis and slow refill may indicate venous congestion, which can lead to tissue ischemia/necrosis.</p> <p>Minimizes postoperative tissue congestion and edema related to excision of lymph channels.</p> <p>Pressure from tubings and tracheostomy tapes or tension on suture lines can alter circulation/cause tissue injury.</p> <p>Bloody drainage usually declines steadily after first 24 hr. Steady oozing or frank bleeding indicates problem requiring medical attention.</p> <p>Milky drainage may indicate thoracic lymph duct leakage (can result in depletion of body fluids and electrolytes). Such a leak may heal spontaneously or require surgical closure.</p> <p>Damp dressings increase risk of tissue damage/infection. <i>Note:</i> Pressure dressings are not used over skin flaps, because blood supply is easily compromised.</p>

ACTIONS/INTERVENTIONS	RATIONALE
<p>Wound Care (NIC)</p> <p>Independent</p> <p>Cleanse incisions with sterile saline and peroxide (mixed 1:1) after dressings have been removed.</p> <p>Monitor donor site if graft performed; check dressings as indicated.</p> <p>Cleanse thoroughly around stoma and neck tubes (if in place), avoiding soap or alcohol. Show patient how to do self-stoma/tube care with clean water and peroxide, using soft, lint-free cloth, not tissue or cotton.</p> <p>Monitor all sites for signs of wound infection, e.g., unusual redness; increasing edema, pain, exudates; and temperature elevation.</p> <p>Collaborative</p> <p>Cover donor sites with petroleum gauze or moisture-impermeable dressing.</p> <p>Administer oral, IV, and topical antibiotics as indicated.</p>	<p>Prevents crust formation, which can trap purulent drainage, destroy skin edges, and increase size of wound. Peroxide is not used full strength because it may cauterize wound edges and impair healing.</p> <p>Donor site may be adjacent to operative site or a distant site (e.g., thigh). Pressure dressings are usually removed within 24–48 hr, and wound is left open to air to promote healing.</p> <p>Keeping area cleansed promotes healing and comfort. Soap and other drying agents can lead to stomal irritation and possible inflammation. Materials other than cloth may leave fibers in stoma that can irritate or be inhaled into lungs.</p> <p>Impedes healing, which may already be slow because of changes induced by cancer, cancer therapies, and/or malnutrition.</p> <p>Nonadherent dressing covers exposed sensory nerve endings and protects site from contamination.</p> <p>Prevents/controls infection.</p>

<p>NURSING DIAGNOSIS: Oral Mucous Membrane, impaired</p> <p>May be related to</p> <p>Dehydration/absence of oral intake; decreased saliva production secondary to radiation (common) or surgical procedure (rare)</p> <p>Poor/inadequate oral hygiene</p> <p>Pathological condition (oral cancer); mechanical trauma (oral surgery)</p> <p>Difficulty swallowing and pooling of secretions/drooling</p> <p>Nutritional deficits</p> <p>Possibly evidenced by</p> <p>Xerostomia (dry mouth), oral discomfort</p> <p>Thick/mucoid saliva, decreased saliva production</p> <p>Dry, crusted, coated tongue; inflamed lips</p> <p>Absent teeth/gums, poor dental health, halitosis</p> <p>DESIRED OUTCOMES/EVALUATION CRITERIA—PATIENT WILL:</p> <p>Tissue Integrity: Skin and Mucous Membranes (NOC)</p> <p>Report/demonstrate a decrease in symptoms.</p> <p>Identify specific interventions to promote healthy oral mucosa.</p> <p>Demonstrate techniques to restore/maintain mucosal integrity.</p>

ACTIONS/INTERVENTIONS	RATIONALE
<p>Oral Health Restoration (NIC)</p>	
<p>Independent</p>	
<p>Inspect oral cavity and note changes in: Saliva;</p>	<p>Damage to salivary glands may decrease production of saliva, resulting in dry mouth. Pooling and drooling of saliva may occur because of compromised swallowing capability or pain in throat and mouth.</p>
<p>Tongue;</p>	<p>Surgery may have included partial resection of tongue, soft palate, and pharynx. This patient has decreased sensation and movement of tongue, with difficulty swallowing and increased risk of aspiration of secretions, as well as potential for hemorrhage.</p>
<p>Lips;</p>	<p>Surgical removal of part of lip may result in uncontrollable drooling.</p>
<p>Teeth and gums;</p>	<p>Teeth may not be intact (surgical) or may be in poor condition because of malnutrition, chemical therapies, and neglect. Gums may also be surgically altered or inflamed because of poor hygiene, long history of smoking/chewing tobacco, or chemical therapies.</p>
<p>Mucous membranes;</p>	<p>May be excessively dry, ulcerated, erythematous, edematous.</p>
<p>Suction oral cavity gently/frequently. Have patient perform self-suctioning when possible or use gauze wick to drain secretions.</p>	<p>Saliva contains digestive enzymes that may be erosive to exposed tissues. Because drooling may be constant, patient can promote own comfort and enhance oral hygiene.</p>
<p>Show patient how to brush inside of mouth, palate, tongue, and teeth frequently.</p>	<p>Reduces bacteria and risk of infection; promotes tissue healing and comfort.</p>
<p>Apply lubrication to lips; provide oral irrigations as indicated.</p>	<p>Counteracts drying effects of therapeutic measures; negates erosive nature of secretions.</p>
<p>Avoid alcohol-based mouthwashes. Use normal saline or mixture of salt water and baking soda for rinsing. Suggest use of artificial saliva preparations (e.g., pilocarpine hydrochloride [Salagen]) if mucous membranes are dry.</p>	<p>Although drooling is often present and abundant immediately postoperatively, surgical damage to the parotid glands can drastically reduce saliva production on a permanent basis. Cholinergic effect of medication can increase saliva production.</p>

NURSING DIAGNOSIS: Pain, acute

May be related to

- Surgical incisions
- Tissue swelling
- Presence of nasogastric/orogastric feeding tube

Possibly evidenced by

- Discomfort in surgical areas/pain with swallowing
- Facial mask of pain
- Distraction behaviors, restlessness; guarding behavior

DESIRED OUTCOMES/EVALUATION CRITERIA—PATIENT WILL:

Pain Level (NOC)

- Report/indicate pain is relieved/controlled.
- Demonstrate relief of pain/discomfort by reduced tension and relaxed manner, sleeping/resting appropriately.

ACTIONS/INTERVENTIONS	RATIONALE
<p>Pain Management (NIC)</p> <p>Independent</p> <p>Support head and neck with pillows. Show patient how to support neck during activity.</p> <p>Provide comfort measures (e.g., back rub, position change) and diversional activities (e.g., television, visiting, reading).</p> <p>Encourage patient to expectorate saliva or to suction mouth gently if unable to swallow.</p> <p>Investigate changes in characteristics of pain. Check mouth, throat suture lines for fresh trauma.</p> <p>Note nonverbal indicators and autonomic responses to pain. Evaluate effects of analgesics.</p> <p>Medicate before activity/treatments as indicated.</p> <p>Schedule care activities to balance with adequate periods of sleep/rest.</p> <p>Recommend use of stress management behaviors, e.g., relaxation techniques, guided imagery.</p>	<p>Muscle weakness results from muscle and nerve resection in the structures of the neck and/or shoulders. Lack of support aggravates discomfort and may result in injury to suture areas.</p> <p>Promotes relaxation and helps patient refocus attention on something besides self/discomfort. May reduce analgesic dosage needs/frequency.</p> <p>Swallowing causes muscle activity that may be painful because of edema/strain on suture lines.</p> <p>May reflect developing complications requiring further evaluation/intervention. Tissues are inflamed and congested and may be easily traumatized by suction catheter or feeding tube.</p> <p>Aids in determining presence of pain, need for/effectiveness of medication.</p> <p>May enhance cooperation and participation in therapeutic regimen.</p> <p>Prevents fatigue/exhaustion and may enhance coping with stress/discomfort.</p> <p>Promotes sense of well-being, may reduce analgesic needs and enhance healing.</p>

ACTIONS/INTERVENTIONS	RATIONALE
<p>Pain Management (NIC)</p> <p>Collaborative</p> <p>Provide oral irrigations, anesthetic sprays, and gargles. Instruct patient in self-irrigations.</p> <p>Administer analgesics, e.g., codeine, acetylsalicylic acid(ASA), and propoxyphene (Darvon), as indicated.</p>	<p>Improves comfort, promotes healing, and reduces halitosis. <i>Note:</i> Commercial mouthwashes containing alcohol or phenol are to be avoided because of their drying effect.</p> <p>Degree of pain is related to extent and psychological impact of surgery and general body condition. Studies appear to support the idea that many patients experience more pain before than after head and neck surgery.</p>

<p>NURSING DIAGNOSIS: Nutrition: imbalanced, less than body requirements</p> <p>May be related to</p> <p>Temporary or permanent alteration in mode of food intake Altered feedback mechanisms of desire to eat, taste, and smell because of surgical/structural changes, radiation, or chemotherapy</p> <p>Possibly evidenced by</p> <p>Inadequate food intake, perceived inability to ingest food Aversion to eating, lack of interest in food, reported altered taste sensation Weight loss Weakness of muscles required for swallowing or mastication</p> <p>DESIRED OUTCOMES/EVALUATION CRITERIA—PATIENT WILL:</p> <p>Nutritional Status (NOC)</p> <p>Indicate understanding of importance of nutrition to healing process and general well-being. Make dietary choices to meet nutrient needs within individual situation. Demonstrate progressive weight gain toward goal, with normalization of laboratory values and timely healing of tissues/incisions.</p>
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ACTIONS/INTERVENTIONS	RATIONALE
<p>Nutrition Therapy (NIC)</p> <p>Independent</p> <p>Auscultate bowel sounds.</p>	<p>Feedings are usually begun after bowel sounds are restored postoperatively. <i>Note:</i> In more aggressive therapy, tube feeding may be started earlier if gastric residuals are closely monitored.</p>

ACTIONS/INTERVENTIONS	RATIONALE
<p>Nutrition Therapy (NIC)</p> <p>Independent</p> <p>Maintain feeding tube, e.g., check for tube placement, flush with warm water as indicated.</p> <p>Monitor intake and weigh as indicated. Show patient how to monitor and record weight on a scheduled basis.</p> <p>Instruct patient/SO in self-feeding techniques, e.g., bulb syringe, bag and funnel method, and blending soft foods if patient is to go home with a feeding tube. Make sure patient and SO are able to perform this procedure before discharge and that appropriate food and equipment are available at home.</p> <p>Begin with small feedings and advance as tolerated. Note signs of gastric fullness, regurgitation, diarrhea.</p> <p>Provide supplemental water by feeding tube or orally if patient can swallow.</p> <p>Encourage patient when relearning swallowing, e.g., maintain quiet environment, have suction equipment on standby, and demonstrate appropriate breathing techniques.</p> <p>Resume oral feedings when feasible. Stay with patient during meals the first few days.</p> <p>Develop and encourage a pleasant environment for meals.</p> <p>Help patient/SO develop nutritionally balanced home meal plans.</p>	<p>Tube is inserted during surgery and usually sutured in place. Initially the tube may be attached to suction to reduce nausea and/or vomiting. Flushing aids in maintaining patency of tube.</p> <p>Provides information regarding nutritional needs and effectiveness of therapy.</p> <p>Helps promote nutritional success and preserves dignity in the adult who is now forced to depend on others for very basic needs in the social setting of meals.</p> <p>Content of feeding may result in GI intolerance, requiring change in rate or type of formula.</p> <p>Keeps patient hydrated to offset insensible losses and drainage from surgical areas. Meets free water needs associated with enteral feeding.</p> <p>Helps patient deal with the frustration and safety concerns involved with swallowing. Provides reassurance that measures are available to prevent/limit aspiration.</p> <p>Oral feedings can usually resume after suture lines are healed (8–10 days) unless further reconstruction is required or patient is going home with feeding tube. Patient may experience pain or difficulty with chewing and swallowing initially and may require suctioning during meals, in addition to support and encouragement.</p> <p>Promotes socialization and maximizes patient comfort when eating difficulties cause embarrassment.</p> <p>Promotes understanding of individual needs and significance of nutrition in healing and recovery process.</p>
<p>Collaborative</p> <p>Consult with dietitian/nutritional support team as indicated. Incorporate and reinforce dietitian’s teaching.</p>	<p>Useful in identifying individual nutritional needs to promote healing and tissue regeneration. Discharge teaching and follow-up by the dietitian may be needed to evaluate patient needs for diet/equipment modifications and meal planning in the home setting.</p>

ACTIONS/INTERVENTIONS	RATIONALE
<p>Nutrition Therapy (NIC)</p> <p>Collaborative</p> <p>Provide nutritionally balanced diet (e.g., semisolid/soft foods) or tube feedings (e.g., blended soft food or commercial preparations) as indicated.</p> <p>Monitor laboratory studies, e.g., blood urea nitrogen (BUN), glucose, liver function, prealbumin/protein, electrolytes.</p>	<p>Variations can be made to add or limit certain factors, such as fat and sugar, or to provide a food that patient prefers.</p> <p>Indicators of utilization of nutrients and organ function.</p>

<p>NURSING DIAGNOSIS: Body Image, disturbed/Role Performance, ineffective</p> <p>May be related to</p> <p>Loss of voice Changes in anatomical contour of face and neck (disfigurement and/or severe functional impairment) Presence of chronic illness</p> <p>Possibly evidenced by</p> <p>Report of fear of rejection by/reaction of others; change in social involvement; discomfort in social situations Negative feelings about body change Refusal to verify actual change or preoccupation with change/loss, not looking at self in mirror Change in self/others' perception of role Anxiety, depression, lack of eye contact Failure of family members to adapt to change or deal with experience constructively</p> <p>DESIRED OUTCOMES/EVALUATION CRITERIA—PATIENT WILL:</p> <p>Body Image (NOC)</p> <p>Identify feelings and methods for coping with negative perception of self. Demonstrate initial adaptation to body changes as evidenced by participating in self-care activities and positive interactions with others.</p> <p>Role Performance (NOC)</p> <p>Communicate with SO about changes in role that have occurred. Begin to develop plans for altered lifestyle. Participate in team efforts toward rehabilitation.</p>

ACTIONS/INTERVENTIONS	RATIONALE
<p>Body Image/Role Enhancement (NIC)</p> <p>Independent</p> <p>Discuss meaning of loss/change with patient, identifying perceptions of current situation/future expectations.</p> <p>Note nonverbal body language, negative attitudes/self-talk. Assess for self-destructive/suicidal behavior.</p> <p>Note emotional reactions, e.g., grieving, depression, anger. Allow patient to progress at own rate.</p> <p>Maintain calm, reassuring manner. Acknowledge and accept expression of feelings of grief, hostility.</p> <p>Allow but do not participate in patient's use of denial, e.g., when patient is reluctant to participate in self-care(e.g., suctioning stoma). Provide care in a nonjudgmental manner.</p> <p>Set limits on maladaptive behaviors, assisting patient to identify positive behaviors that will aid recovery.</p> <p>Encourage SO to treat patient normally and not as an invalid.</p> <p>Alert staff that facial expressions and other nonverbal behaviors need to convey acceptance and not revulsion.</p> <p>Encourage identification of anticipated personal/work conflicts that may arise.</p> <p>Recognize behavior indicative of overconcern with future lifestyle/relationship functioning.</p> <p>Encourage patient to deal with situation in small steps.</p> <p>Provide positive reinforcement for efforts/progress made.</p> <p>Encourage patient/SO to communicate feelings to each other.</p>	<p>Aids in identifying/defining the problem(s) to focus attention and interventions constructively.</p> <p>May indicate depression/despair, need for further assessment/more intense intervention.</p> <p>Patient may experience immediate depression after surgery or react with shock and denial. Acceptance of changes cannot be forced, and the grieving process needs time for resolution.</p> <p>May help allay patient's fears of dying, suffocation, inability to communicate, or mutilation. Patient and SO need to feel supported and know that all feelings are appropriate for the type of experience they are going through.</p> <p>Denial may be the most helpful defense for patient in the beginning, permitting the individual to begin to deal slowly with difficult adjustment.</p> <p>Acting out can result in lowered self-esteem and impede adjustment to new self-image.</p> <p>Distortions of body image may be unconsciously reinforced.</p> <p>Patient is very sensitive to nonverbal communication and may make negative assumptions about others' body language.</p> <p>Expressions of concern bring problems into the open where they can be examined/dealt with.</p> <p>Ruminating about anticipated losses/reactions of others is nonproductive and is a block to problem solving.</p> <p>May feel overwhelmed/have difficulty coping with larger picture but can manage one piece at a time.</p> <p>Encourages patient to feel a sense of movement toward recovery.</p> <p>All those involved may have difficulty in this area (because of the loss of voice function and/or disfigurement) but need to understand that they may gain courage and help from one another.</p>

ACTIONS/INTERVENTIONS	RATIONALE
<p>Body Image/Role Enhancement (NIC)</p> <p>Collaborative</p> <p>Refer patient/SO to supportive resources, e.g., psychotherapy, social worker, family counseling, pastoral care.</p>	<p>A multifaceted approach is required to assist patient toward rehabilitation and wellness. Families need assistance in understanding the processes that patient is going through and to help them with their own emotions. The goal is to enable them to guard against the tendency to withdraw from/isolate patient from social contact.</p>

<p>NURSING DIAGNOSIS: Knowledge, deficient [Learning Need] regarding prognosis, treatment, self-care, and discharge needs</p> <p>May be related to</p> <p>Lack of information/recall Misinterpretation of information Poor assimilation of material presented; lack of interest in learning</p> <p>Possibly evidenced by</p> <p>Indications of concern/request for information Inaccurate follow-through of instructions Inappropriate or exaggerated behaviors, e.g., hostile, agitated, apathetic</p> <p>DESIRED OUTCOMES/EVALUATION CRITERIA—PATIENT WILL:</p> <p>Knowledge: Disease Process (NOC) Indicate basic understanding of disease process, surgical intervention, prognosis. Identify symptoms requiring medical evaluation/intervention.</p> <p>Knowledge: Treatment Regimen (NOC) Verbalize understanding of treatment regimen and rationale for actions. Demonstrate ability to provide safe care. Use resources (e.g., rehabilitation team members) appropriately. Develop plan for/schedule follow-up appointments.</p>
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ACTIONS/INTERVENTIONS	RATIONALE
<p>Learning Facilitation (NIC)</p> <p>Independent</p> <p>Ascertain amount of preoperative preparation and retention of information. Assess level of anxiety related to diagnosis and surgery.</p> <p>Provide/repeat explanations at patient's level of acceptance.</p> <p>Provide written directions for patient/SO to read and have available for future reference.</p>	<p>Information can provide clues to patient's postoperative reactions. Anxiety may have interfered with understanding of information given before surgery.</p> <p>Overwhelming stressors are present and may be coupled with limited knowledge.</p> <p>Reinforces proper information and may be used as a home reference.</p>

ACTIONS/INTERVENTIONS	RATIONALE
<p>Teaching: Disease Process (NIC)</p>	
<p>Independent</p>	
<p>Discuss inaccuracies in perception of disease process and therapies with patient and SO.</p>	<p>Misconceptions are inevitable, but failure to explore and correct them can result in patient's failing to progress toward health.</p>
<p>Educate patient and SO about basic information regarding stoma, e.g.:</p>	
<p> Shower with stoma collar; shampoo by leaning forward; no swimming or water sports;</p>	<p>Although the extra humidity provided by a shower can be beneficial by loosening secretions and enhancing expectoration, excessive water entering airway/stoma is detrimental.</p>
<p> Cover stoma with foam or fiber filter (e.g., cotton or silk);</p>	<p>Prevents dust and particles from being inhaled.</p>
<p> Cover stoma when coughing or sneezing.</p>	<p>Normal airways are bypassed, and mucus will exit from stoma.</p>
<p>Reinforce necessity of not smoking.</p>	<p>Necessary to preserve lung function. <i>Note:</i> Patient may need extra support and encouragement to understand that respiratory function and quality of life can be improved by cessation of smoking.</p>
<p>Discuss inability to smell and taste as before surgery.</p>	<p>Safety issues surround the inability to smell (e.g., smoke from fire or odor from infection in stoma). Also the loss of taste affects the desire to resume eating when patient is otherwise able to do so.</p>
<p>Discuss importance of reporting to caregiver/physician immediately such symptoms as stoma narrowing, presence of "lump" in throat, dysphagia, or bleeding.</p>	<p>May be signs of tracheal stenosis, recurrent cancer, or carotid erosion.</p>
<p>Develop a means of emergency communication at home.</p>	<p>Permits patient to summon assistance when needed.</p>
<p>Recommend wearing medical-alert identification tag/bracelet identifying patient as a neck breather. Encourage family members to become certified in cardiopulmonary resuscitation (CPR) if they are interested/able to do so.</p>	<p>Provides for appropriate care if patient becomes unconscious or suffers a pulmonary arrest.</p>
<p>Give careful attention to the provision of needed rehabilitative measures, e.g., temporary/permanent prosthesis, dental care, speech therapy, surgical reconstruction; vocational, sexual/marital counseling; financial assistance.</p>	<p>These services can contribute to patient's well-being and have a positive effect on patient's quality of life.</p>
<p>Identify homecare needs and available resources.</p>	<p>Provides support for transition from hospital setting.</p>

POTENTIAL CONSIDERATIONS following acute hospitalization (dependent on patient's age, physical condition/presence of complications, personal resources, and life responsibilities)

Aspiration, risk for—presence of tracheostomy, tube feedings, impaired swallowing, decreased muscle mass/strength (status after neck surgery).

Communication, impaired verbal—anatomical presence of tracheostomy.

Infection, risk for—broken skin/traumatized tissue, stasis of secretions, suppressed inflammatory response, chronic disease, malnutrition.

Nutrition: imbalanced, less than body requirements—temporary alteration in mode of food intake, altered feedback mechanisms relative to senses of taste and smell.

Self-Care deficit—decreased strength/endurance, presence of pain, depression.