

THYROIDECTOMY

Thyroidectomy, although rare, may be performed for patients with thyroid cancer, hyperthyroidism, and drug reactions to antithyroid agents; pregnant women who cannot be managed with drugs; patients who do not want radiation therapy; and patients with large goiters who do not respond to antithyroid drugs. The two types of thyroidectomy include:

Total thyroidectomy: The gland is removed completely. Usually done in the case of malignancy. Thyroid replacement therapy is necessary for life.

Subtotal thyroidectomy: Up to five-sixths of the gland is removed when antithyroid drugs do not correct hyperthyroidism or RAI therapy is contraindicated.

CARE SETTING

Inpatient acute surgical unit

RELATED CONCERNS

Cancer

Hyperthyroidism (thyrotoxicosis, Graves' disease)

Psychosocial aspects of care

Surgical intervention

Patient Assessment Database

Refer to CP: Hyperthyroidism (Thyrotoxicosis, Graves' Disease), for assessment information.

Discharge plan considerations: DRG projected mean length of inpatient stay: 2.4 days

Refer to section at end of plan for postdischarge considerations.

NURSING PRIORITIES

1. Reverse/manage hyperthyroid state preoperatively.
2. Prevent complications.
3. Relieve pain.
4. Provide information about surgical procedure, prognosis, and treatment needs.

DISCHARGE GOALS

1. Complications prevented/minimized.
2. Pain alleviated.
3. Surgical procedure/prognosis and therapeutic regimen understood.
4. Plan in place to meet needs after discharge.

NURSING DIAGNOSIS: Airway Clearance, risk for ineffective

Risk factors may include

Tracheal obstruction; swelling, bleeding, laryngeal spasms

Possibly evidenced by

[Not applicable; presence of signs and symptoms establishes an *actual* diagnosis.]

DESIRED OUTCOMES/EVALUATION CRITERIA—PATIENT WILL:

Respiratory Status: Airway Patency (NOC)

Maintain patent airway, with aspiration prevented.

| ACTIONS/INTERVENTIONS | RATIONALE |
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| <p>Airway Management (NIC)</p> <p>Independent</p> <p>Monitor respiratory rate, depth, and work of breathing.</p> <p>Auscultate breath sounds, noting presence of rhonchi.</p> <p>Assess for dyspnea, stridor, “crowing,” and cyanosis. Note quality of voice.</p> <p>Caution patient to avoid bending neck; support head with pillows.</p> <p>Assist with repositioning, deep breathing exercises, and/or coughing as indicated.</p> <p>Suction mouth and trachea as indicated, noting color and characteristics of sputum.</p> <p>Check dressing frequently, especially posterior portion.</p> <p>Investigate reports of difficulty swallowing, drooling of oral secretions.</p> <p>Keep tracheostomy tray at bedside.</p> | <p>Respirations may remain somewhat rapid, but development of respiratory distress is indicative of tracheal compression from edema or hemorrhage.</p> <p>Rhonchi may indicate airway obstruction/accumulation of copious thick secretions.</p> <p>Indicators of tracheal obstruction/laryngeal spasm, requiring prompt evaluation and intervention.</p> <p>Reduces likelihood of tension on surgical wound.</p> <p>Maintains clear airway and ventilation. Although “routine” coughing is not encouraged and may be painful, it may be needed to clear secretions.</p> <p>Edema/pain may impair patient’s ability to clear own airway.</p> <p>If bleeding occurs, anterior dressing may appear dry because blood pools dependently.</p> <p>May indicate edema/sequestered bleeding in tissues surrounding operative site.</p> <p>Compromised airway may create a life-threatening situation requiring emergency procedure.</p> |
| <p>Collaborative</p> <p>Provide steam inhalation; humidify room air.</p> <p>Assist with/prepare for procedures, e.g.: Tracheostomy;</p> <p>Return to surgery.</p> | <p>Reduces discomfort of sore throat and tissue edema and promotes expectoration of secretions.</p> <p>May be necessary to maintain airway if obstructed by edema of glottis or hemorrhage.</p> <p>May require ligation of bleeding vessels.</p> |

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| <p>NURSING DIAGNOSIS: Communication, impaired verbal</p> <p>May be related to Vocal cord injury/laryngeal nerve damage Tissue edema; pain/discomfort</p> <p>Possibly evidenced by Impaired articulation, does not/cannot speak; use of nonverbal cues such as gestures</p> <p>DESIRED OUTCOMES/EVALUATION CRITERIA—PATIENT WILL:</p> <p>Communication Ability (NOC) Establish method of communication in which needs can be understood.</p> |
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| ACTIONS/INTERVENTIONS | RATIONALE |
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| <p>Communication Enhancement: Speech Deficit (NIC)</p> <p>Independent</p> <p>Assess speech periodically; encourage voice rest.</p> <p>Keep communication simple; ask yes/no questions.</p> <p>Provide alternative methods of communication as appropriate, e.g., slate board, letter/picture board. Place IV line to minimize interference with written communication.</p> <p>Anticipate needs as possible. Visit patient frequently.</p> <p>Post notice of patient's voice limitations at central station and answer call bell promptly.</p> <p>Maintain quiet environment.</p> | <p>Hoarseness and sore throat may occur secondary to tissue edema or surgical damage to recurrent laryngeal nerve and may last several days. Permanent nerve damage can occur (rare) that causes paralysis of vocal cords and/or compression of the trachea.</p> <p>Reduces demand for response; promotes voice rest.</p> <p>Facilitates expression of needs.</p> <p>Reduces anxiety and patient's need to communicate.</p> <p>Prevents patient from straining voice to make needs known/summon assistance.</p> <p>Enhances ability to hear whispered communication and reduces necessity for patient to raise/strain voice to be heard.</p> |

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| <p>NURSING DIAGNOSIS: Injury, risk for [tetany]</p> <p>Risk factors may include Chemical imbalance: excessive CNS stimulation</p> <p>Possibly evidenced by [Not applicable; presence of signs and symptoms establishes an <i>actual</i> diagnosis.]</p> <p>DESIRED OUTCOMES/EVALUATION CRITERIA—PATIENT WILL:</p> <p>Safety Status: Physical Injury (NOC) Demonstrate absence of injury with complications minimized/controlled.</p> |
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| ACTIONS/INTERVENTIONS | RATIONALE |
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| <p>Surveillance (NIC)</p> <p>Independent</p> <p>Monitor vital signs noting elevating temperature, tachycardia (140–200 beats/min), dysrhythmias, respiratory distress, cyanosis (developing pulmonary edema/HF).</p> | <p>Manipulation of gland during subtotal thyroidectomy may result in increased hormone release, causing thyroid storm.</p> |

| ACTIONS/INTERVENTIONS | RATIONALE |
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| <p>Surveillance (NIC)</p> <p>Independent</p> <p>Evaluate reflexes periodically. Observe for neuromuscular irritability, e.g., twitching, numbness, paresthesias, positive Chvostek's and Trousseau's signs, seizure activity.</p> <p>Keep side rails raised/padded, bed in low position, and airway at bedside. Avoid use of restraints.</p> <p>Collaborative</p> <p>Monitor serum calcium levels.</p> <p>Administer medications as indicated:</p> <ul style="list-style-type: none"> Calcium (gluconate, lactate); Phosphate-binding agents; Sedatives; Anticonvulsants. | <p>Hypocalcemia with tetany (usually transient) may occur 1–7 days postoperatively and indicates hypoparathyroidism, which can occur as a result of inadvertent trauma to/partial-to-total removal of parathyroid gland(s) during surgery.</p> <p>Reduces potential for injury if seizures occur. (Refer to CP: Seizure Disorders, ND: Trauma/Suffocation, risk for.)</p> <p>Patients with levels less than 7.5 mg/100 mL generally require replacement therapy.</p> <p>Corrects deficiency, which is usually temporary but may be permanent. <i>Note:</i> Use with caution in patients taking digitalis because calcium increases cardiac sensitivity to digitalis, potentiating risk of toxicity.</p> <p>Helpful in lowering elevated phosphorus levels associated with hypocalcemia.</p> <p>Promotes rest, reducing exogenous stimulation.</p> <p>Controls seizure activity until corrective therapy is successful.</p> |

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| <p>NURSING DIAGNOSIS: Pain, acute</p> <p>May be related to</p> <p>Surgical interruption/manipulation of tissues/muscles Postoperative edema</p> <p>Possibly evidenced by</p> <p>Reports of pain Narrowed focus; guarding behavior; restlessness Autonomic responses</p> <p>DESIRED OUTCOMES/EVALUATION CRITERIA—PATIENT WILL:</p> <p>Pain Control (NOC)</p> <p>Report pain is relieved/controlled. Demonstrate use of relaxation skills and diversional activities appropriate to situation.</p> |
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| ACTIONS/INTERVENTIONS | RATIONALE |
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| <p>Pain Management (NIC)</p> <p>Independent</p> <p>Assess verbal/nonverbal reports of pain, noting location, intensity (0–10 scale), and duration.</p> <p>Place in semi-Fowler’s position and support head/neck with sandbags or small pillows.</p> <p>Maintain head/neck in neutral position and support during position changes. Instruct patient to use hands to support neck during movement and to avoid hyperextension of neck.</p> <p>Keep call bell and frequently needed items within easy reach.</p> <p>Give cool liquids or soft foods, such as ice cream or popsicles.</p> <p>Encourage patient to use relaxation techniques, e.g., guided imagery, soft music, progressive relaxation.</p> <p>Collaborative</p> <p>Administer analgesics and/or analgesic throat sprays/lozenges as necessary.</p> <p>Provide ice collar if indicated.</p> | <p>Useful in evaluating pain, choice of interventions, effectiveness of therapy.</p> <p>Prevents hyperextension of the neck and protects integrity of the suture line.</p> <p>Prevents stress on the suture line and reduces muscle tension.</p> <p>Limits stretching, muscle strain in operative area.</p> <p>Although both may be soothing to sore throat, soft foods may be tolerated better than liquids if patient experiences difficulty swallowing.</p> <p>Helps refocus attention and assists patient to manage pain/discomfort more effectively.</p> <p>Reduces pain and discomfort; enhances rest.</p> <p>Reduces tissue edema and decreases perception of pain.</p> |

NURSING DIAGNOSIS: Knowledge, deficient [Learning Need] regarding condition, prognosis, treatment, self-care, and discharge needs

May be related to
Lack of exposure/recall, misinterpretation
Unfamiliarity with information resources

Possibly evidenced by
Questions; request for information; statement of misconception
Inaccurate follow-through of instructions/development of preventable complications

DESIRED OUTCOMES/EVALUATION CRITERIA—PATIENT WILL:

Knowledge: Disease Process (NOC)
Verbalize understanding of surgical procedure and prognosis and potential complications.

Knowledge: Treatment Regimen (NOC)
Verbalize understanding of therapeutic needs.
Participate in treatment regimen.
Initiate necessary lifestyle changes.

| ACTIONS/INTERVENTIONS | RATIONALE |
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| <p>Teaching; Disease Process (NIC)</p> | |
| <p>Independent</p> | |
| <p>Review surgical procedure and future expectations.</p> | <p>Provides knowledge base from which patient can make informed decisions.</p> |
| <p>Discuss need for well-balanced, nutritious diet and, when appropriate, inclusion of iodized salt.</p> | <p>Promotes healing and helps patient regain/maintain appropriate weight. Use of iodized salt is often sufficient to meet iodine needs unless salt is restricted for other healthcare problems, e.g., HF.</p> |
| <p>Recommend avoidance of goitrogenic foods, e.g., excessive ingestion of seafood, soybeans, turnips.</p> | <p>Contraindicated after partial thyroidectomy because these foods inhibit thyroid activity.</p> |
| <p>Identify foods high in calcium (e.g., dairy products) and vitamin D (e.g., fortified dairy products, egg yolks, liver).</p> | <p>Maximizes supply and absorption of calcium if parathyroid function is impaired.</p> |
| <p>Encourage progressive general exercise program.</p> | <p>In patients with subtotal thyroidectomy, exercise can stimulate the thyroid gland and production of hormones, facilitating recovery of general well-being.</p> |
| <p>Review postoperative exercises to be instituted after incision heals, e.g., flexion, extension, rotation, and lateral movement of head and neck.</p> | <p>Regular ROM exercises strengthen neck muscles, enhance circulation and healing process.</p> |
| <p>Review importance of rest and relaxation, avoiding stressful situations and emotional outbursts.</p> | <p>Effects of hyperthyroidism usually subside completely, but it takes some time for the body to recover.</p> |
| <p>Instruct in incisional care, e.g., cleansing, dressing application.</p> | <p>Enables patient to provide competent self-care.</p> |
| <p>Recommend the use of loose-fitting scarves to cover scar, avoiding the use of jewelry.</p> | <p>Covers the incision without aggravating healing or precipitating infections of suture line.</p> |
| <p>Apply cold cream after sutures have been removed.</p> | <p>Softens tissues and may help minimize scarring.</p> |
| <p>Discuss possibility of change in voice.</p> | <p>Alteration in vocal cord function may cause changes in pitch and quality of voice, which may be temporary or permanent.</p> |
| <p>Review drug therapy and the necessity of continuing even when feeling well.</p> | <p>If thyroid hormone replacement is needed because of surgical removal of gland, patient needs to understand rationale for replacement therapy and consequences of failure to routinely take medication.</p> |
| <p>Identify signs/symptoms requiring medical evaluation, e.g., fever, chills, continued/purulent wound drainage, erythema, gaps in wound edges, sudden weight loss, intolerance to heat, nausea/vomiting, diarrhea, insomnia, weight gain, fatigue, intolerance to cold, constipation, drowsiness.</p> | <p>Early recognition of developing complications such as infection, hyperthyroidism, or hypothyroidism may prevent progression to life-threatening situation. <i>Note:</i> As many as 43% of patients with subtotal thyroidectomy will develop hypothyroidism in time.</p> |

| ACTIONS/INTERVENTIONS | RATIONALE |
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| <p>Teaching; Disease Process (NIC)</p> <p>Independent</p> <p>Stress necessity of continued medical follow-up.</p> | <p>Provides opportunity for evaluating effectiveness of therapy and prevention of complications.</p> |

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

Fatigue—decreased metabolic energy production, altered body chemistry (hypothyroidism)

Refer to Potential Considerations in Surgical Intervention plan of care.