**Nursing Process Focus:**
**Patients Receiving Celecoxib**

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Potential Nursing Diagnoses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to administration:</td>
<td>• Risk for Injury (gastrointestinal bleeding), related to adverse effects of the drug</td>
</tr>
<tr>
<td>• Obtain complete health history including allergies, drug history and possible drug interactions.</td>
<td>• Impaired Physical Mobility, related to joint disease</td>
</tr>
<tr>
<td>• Assess for presence/history of:</td>
<td>• Deficient Knowledge, related to drug action and side effects</td>
</tr>
<tr>
<td>• Rheumatoid arthritis</td>
<td>-</td>
</tr>
<tr>
<td>• Osteoarthritis</td>
<td></td>
</tr>
<tr>
<td>• Congestive heart failure</td>
<td></td>
</tr>
<tr>
<td>• Hypertension</td>
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</tr>
<tr>
<td>• Renal disease</td>
<td></td>
</tr>
<tr>
<td>• Pregnancy</td>
<td></td>
</tr>
<tr>
<td>• Assess renal function tests, e.g. BUN, creatinine levels.</td>
<td></td>
</tr>
</tbody>
</table>

**Planning: Patient Goals and Expected Outcomes**

The patient will:
• Avoid evidence of gastrointestinal bleeding.
• Demonstrate compliance with lifestyle modifications necessary for successful drug therapy.
• Demonstrate knowledge of drug action and side effects of drug.

**Implementation**

**Interventions and (Rationales)**

<table>
<thead>
<tr>
<th></th>
<th>Patient Education/Discharge Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Monitor for congestive heart failure, fluid retention, hypertension, and renal disease. (Use cautiously in these patients, as drug may cause increased edema and fluid retention.)</td>
<td>Advise patient: <em>to report any difficulty breathing to the health care provider immediately.</em></td>
</tr>
<tr>
<td>• Monitor vital signs (especially pulse and blood pressure) for baseline information and to monitor the drug’s possible effect of COX 1 inhibition on renal vasodilation.</td>
<td><em>to report to the health care provider immediately, any blood in the stool, any swelling or skin rash, or any yellow coloration to the eyes or skin.</em></td>
</tr>
</tbody>
</table>

*Monitor intake and output (due to possible drug interactions that may decrease function of reabsorption of water at the loop of Henle.)*

*Monitor for gastrointestinal distress such as nausea, diarrhea, abdominal pain, or flatulence.*

*Monitor liver function, complete blood count, BUN, serum creatinine, and serum electrolytes.*

*Monitor lithium levels in patients who are taking lithium. (Celecoxib may alter established lithium levels.)*

**Evaluation of Outcome Criteria**

Evaluate the effectiveness of drug therapy by confirming that patient goals and expected outcomes have been met (see “Planning”).
Nursing Process Focus:
Patients Receiving Prednisone (Meticorten)

Assessment
Prior to administration:
- Obtain complete health history including allergies, drug history and possible drug interactions.
- Assess vital signs.
- Assess for history of organ transplant, acute inflammation, diabetes mellitus.
- Obtain serum electrolytes.

Potential Nursing Diagnoses
- Risk for Imbalanced Nutrition: More than Body Requirements, related to weight gain from drug
- Excess Fluid Volume, related to fluid retention secondary to drug
- Disturbed Body Image, related to physical changes secondary to drug
- Risk for Injury (infection), related to immunosuppression from drug
- Impaired Skin Integrity, related to tissue fragility secondary to drug

Planning: Patient Goals and Expected Outcomes
The patient will:
- Maintain body weight within normal range.
- Remain free of edema in lower extremities.
- Demonstrate positive body image.
- Maintain intact skin integrity.

Implementation

<table>
<thead>
<tr>
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<tr>
<td>Monitor vital signs, especially blood pressure. (To determine need for possible treatment of fluid and electrolyte disorders and renal insufficiency.) Use cautiously in patients with renal insufficiency (due to the drug’s ability to retain water and sodium and the main excretion of drug is by the renal system.)</td>
<td>*Inform patient to report to health care provider any signs and symptoms of fluid retention; e.g. increase in weight by 2 lbs in a week, swelling of hands and feet, difficulty breathing.</td>
</tr>
<tr>
<td>*Monitor complete blood count. (Capillaries become more permeable resulting in vasoconstriction. Red blood cells increase, causing decrease in white blood cells.)</td>
<td></td>
</tr>
<tr>
<td>*Monitor for acute inflammation (due to drug’s ability to mask symptoms of inflammation.)</td>
<td></td>
</tr>
<tr>
<td>*Obtain medical history of myasthenia gravis (due to the possible adverse effect of exacerbation of respiratory failure.)</td>
<td>*Instruct patient to report any difficulty in breathing to health care provider immediately.</td>
</tr>
<tr>
<td>*Monitor blood sugar. (Use cautiously in patients with diabetes mellitus due to drug’s effect on blood sugar, causing hyperglycemia. Patients may require increased doses of a glucose-lowering drug.)</td>
<td>Instruct patient: to increase blood sugar monitoring to report increased blood sugar to health care provider. may increase insulin needs while on this medication.</td>
</tr>
</tbody>
</table>
| *Monitor for signs and symptoms of infection. (Medication may mask usual signs of infection. Use cautiously in patients with acute active infections. Contraindicated in patients with systemic fungal infection due to the possibility of interaction with the acute infection and the risk for superinfections.) | Instruct patient:  
- to avoid all contact with individuals with infections.  
- to wash hands frequently and to clean all counters completely after food preparation. |
| --- | --- |
| *Monitor compliance with medication regimen. | Instruct patient:  
- to take medication exactly as scheduled.  
- to never abruptly stop medication.  
- to avoid taking any OTC drugs without checking with the health care provider. |
| *Monitor intake and output (due to drug’s ability to cause water and sodium retention.) | Instruct patient:  
- to weigh self regularly.  
- to report any sudden weight gain to the health care provider. |
| *Obtain history of gastrointestinal disorders. (Use cautiously in patients with active peptic ulcer disease due to inhibiting production of cytoprotective mucous and reduction of GI mucosal blood flow that can lead to gastric ulceration.) | *Advise patient to take medication with food to decrease gastrointestinal distress. |
| *Use extreme care during venipuncture due to capillary fragility. (Capillary fragility is due to the suppression of protein synthesis by the glucocorticoids’ effect.) | *Advise patient to carry some form of identification stating the medication the patient is taking. |
| *Evaluate risk for osteoporosis. (Use cautiously in patients with osteoporosis due to drug’s effect to cause suppression of bone formation by osteoblasts, hence to worsen symptoms of osteoporosis.) | *Advise patient to consume nutritious low calorie foods and to increase dietary calcium to combat osteoporosis. |

**Evaluation of Outcome Criteria**

Evaluate the effectiveness of drug therapy by confirming that patient goals and expected outcomes have been met (see “Planning”).
**Nursing Process Focus:**
**Patients Receiving Acetaminophen (Tylenol)**

### Assessment
Prior to administration:
- Obtain complete health history including allergies, drug history and possible drug interactions.
- Obtain history of liver disease.
- Assess history of pain or fever.
- Obtain concurrent use of anticoagulants.
- Obtain intolerance to ASA.

### Potential Nursing Diagnoses
- Pain, related to ineffective response to drug
- Risk for Injury (hepatic toxicity), related to adverse effects of drug
- Deficient Knowledge, related to drug action and side effects

### Planning: Patient Goals and Expected Outcomes
The patient will:
- Demonstrate an understanding of safe self-administration of medication.
- Demonstrate relief of pain.
- Remain free of evidence of hepatic toxicity.

### Implementation

<table>
<thead>
<tr>
<th>Interventions and (Rationales)</th>
<th>Patient Education/Discharge Planning</th>
</tr>
</thead>
</table>
| *Monitor for evidence of liver dysfunction (due to acetaminophen accumulation, and resulting liver damage).* | Advise patient:  
- to abstain from alcohol while taking this medication.  
- to report signs of liver dysfunction including jaundice, itching, fatigue. |
| *Monitor renal function tests and intake and output (due to the ability of acetaminophen to impair renal function as a result of toxic levels.)* | Advise patient:  
- that lab tests to assess renal function may be necessary to prevent renal tubular necrosis.  
- to notify health care provider if changes in urinary output occurs. |
| *Monitor concurrent medication use.*  
(Be alert to all other medications that contain acetaminophen especially in combination with narcotic pain reliever to avoid toxic levels. Contraindicated for use with warfarin due to the mechanism of inhibition of warfarin metabolism, which causes warfarin to accumulate at high levels.) | Advise patient:  
- to avoid taking any other OTC medication unless ordered by health care provider.  
- to read directions carefully when using acetaminophen suspension and drops.  
- not to exceed recommended daily dose of medication. |
| *Observe for intolerance to ASA for possible cross-hypersensitivity to acetaminophen.* | *Instruct patient to report any itching, skin rash, or difficulty breathing. |
| *Monitor for signs of infection, including complete blood count and platelet count.  
(Acetaminophen’s effects may mask infection.)* | *Instruct patient to report signs of infection, generalized mild muscular pain, and headache. |
| *Monitor pain level (to determine effectiveness of drug therapy.)* | *Instruct patient to report changes in pain level to health care provider.* |
| **Monitor blood sugar in patients with diabetes mellitus. (Acetaminophen may decrease insulin needs.)** | **Advise patient that this medication may cause hypoglycemia.** |

**Evaluation of Outcome Criteria**

Evaluate the effectiveness of drug therapy by confirming that patient goals and expected outcomes have been met (see “Planning”).
**Nursing Process Focus:**  
**Patients Receiving Diphendrydramine (Benadryl)**

<table>
<thead>
<tr>
<th>Assessment Prior to administration:</th>
<th>Potential Nursing Diagnoses</th>
</tr>
</thead>
</table>
| • Obtain complete health history including allergies, drug history and possible drug interactions.  
• Obtain presence/history of allergic or anaphylactic reactions.  
• Obtain vital signs.  
• Obtain history of glaucoma, diabetes mellitus, seizure disorder. | • Risk for Injury, related to drowsiness and dizziness secondary to effects of drug  
• Impaired Gas Exchange, related to respiratory secretions  
• Deficient Knowledge, related to drug action and side effects. |

**Planning: Patient Goals and Expected Outcomes**

The patient will:  
• Remain free of physical injury.  
• Demonstrate knowledge of drug therapy and side effects.  
• Remain demonstrate relief of symptoms of allergic reaction.

**Implementation**

<table>
<thead>
<tr>
<th>Interventions and (Rationales)</th>
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</table>
| *Monitor vital signs before, during, and after administration (due to anticholinergic effect on vital signs of decreased BP and increased heart rate.) | Advise patient:  
• that blood pressure may decrease and heart rate increase.  
• to report changes in vital signs to health care provider.  
• to monitor blood pressure and pulse. |
| *Obtain history of narrow angle glaucoma and increased intraocular pressure. (Drug may worsen condition.) | *Instruct patient to report history of glaucoma to health care provider. |
| *Obtain history of prostatic hypertrophy and bladder neck obstruction. (Both conditions are contraindicated for use with diphenhydramine due to exacerbation by anticholinergic effects and muscarinic blockade.) | *Instruct patient to report any urinary obstruction or difficulty in voiding. |
| *Monitor for respiratory conditions. (Drug may worsen conditions such as asthma.) | Instruct patient:  
• to report symptoms of respiratory distress to the health care provider.  
• to increase fluid intake to make expectoration easier. |
| *Monitor for GI conditions and distress. (Drug interferes with function of H1 receptors.) | *Advise patient to take medication with food to reduce gastrointestinal distress. |
| *Obtain history of diabetes mellitus. (Use cautiously in these patients due to the possibility of this drug to increase hypoglycemia.) | Advise patient:  
• to monitor blood sugar more frequently.  
• to inform health care provider of any abnormally low blood sugar levels. |
| **Monitor neurological status, especially for patients with history of seizures. (Use cautiously in these patients due to medication causing an increase in seizure activity.)** | **Instruct patients:**  
- to report aura immediately to health care provider.  
- to report increase of seizure activity to health care provider. |
| **Use cautiously in patients with history of hyperthyroidism, cardiovascular disease. (There is an increased risk of thyroid storm, and cardiovascular collapse.)** | **Advise patient:**  
- to report any unusual effects such as increased nervousness, insomnia.  
- to report changes in vital signs. |
| **Monitor for side effects such as dry mouth.** | **Advise patient to suck on hard candy to reduce symptoms of dry mouth.** |
| **Closely monitor elderly patients (because of an increase incidence of dizziness, sedation and hypotension.)** | **Advise patient:**  
- to refrain from driving or operating heavy machinery due to sedating effects.  
- to report feeling of oversedation to the health care provider. |
| **Discontinue at least 4 days prior to skin tests. (Drug may increase effect to the testing and give a false positive result.)** | **Inform patient to notify health care provider if they are on any H1 receptor antagonists.** |

**Evaluation of Outcome Criteria**

Evaluate the effectiveness of drug therapy by confirming that patient goals and expected outcomes have been met (see “Planning”).
Nursing Process Focus:  
Patients Receiving Fexofenadine (Allegra)

<table>
<thead>
<tr>
<th>Assessment</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Prior to administration</td>
<td></td>
</tr>
<tr>
<td>• Obtain complete health history including allergies, drug history and possible drug interactions.</td>
<td>• Risk for Injury, related to drug-related drowsiness</td>
</tr>
<tr>
<td>• Assess for presence/history of seasonal allergic rhinitis, allergic conjunctivitis, urticaria, angioedema.</td>
<td>• Deficient Knowledge, related to drug action and side effects</td>
</tr>
<tr>
<td>• Obtain vital signs.</td>
<td></td>
</tr>
</tbody>
</table>

**Potential Nursing Diagnoses**

- Risk for Injury, related to drug-related drowsiness
- Deficient Knowledge, related to drug action and side effects

**Planning: Patient Goals and Expected Outcomes**

The patient will:
- Demonstrate understanding of drug therapy.
- Remain free from physical injury.

<table>
<thead>
<tr>
<th>Planning: Patient Goals and Expected Outcomes</th>
</tr>
</thead>
</table>

**Implementation**

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>*Monitor neurological status of elderly patients. (The elderly are more prone to syncope, sedation and dizziness due to long-acting effects of medication.)</td>
<td>Advise patient:</td>
</tr>
<tr>
<td></td>
<td>• to avoid driving or operating heavy machinery until drowsiness is no longer a problem.</td>
</tr>
<tr>
<td></td>
<td>• to resort symptoms of over-sedation to health care provider.</td>
</tr>
<tr>
<td>*Monitor respiratory status prior to therapy (due to anticholinergic effects on respiratory system.)</td>
<td></td>
</tr>
<tr>
<td>*Monitor for renal impairment. (Use with caution in these patients due to aggravating factors related to muscarinic blockade.)</td>
<td>*Advise patient to report changes in urinary pattern or output.</td>
</tr>
<tr>
<td>*Observe for allergic conditions, such as seasonal allergic rhinitis, allergic conjunctivitis, and urticaria (to monitor effectiveness of drug therapy.)</td>
<td>*Instruct patient to report changes in allergic condition to health care provider.</td>
</tr>
<tr>
<td>*Monitor vital signs, especially heart rate and respiratory rate.</td>
<td>Advise patient:</td>
</tr>
<tr>
<td></td>
<td>• not to take any OTC cold medications without first checking with the health care provider.</td>
</tr>
<tr>
<td></td>
<td>• to abstain from the use of alcohol while taking this medication.</td>
</tr>
</tbody>
</table>

**Evaluation of Outcome Criteria**

Evaluate the effectiveness of drug therapy by confirming that patient goals and expected outcomes have been met (see “Planning”).
**Nursing Process Focus:**  
Patients Receiving Fluticasone (Flonase)

### Assessment
Prior to administration
- Obtain complete health history including allergies, drug history and possible drug interactions.
- Assess for presence or history of seasonal allergic rhinitis.
- Obtain vital signs.

### Potential Nursing Diagnoses
- Risk for Injury, related to adverse effects of drug
- Deficient Knowledge, related to drug action and side effects

### Planning: Patient Goals and Expected Outcomes
The patient will:
- Remain free from physical injury.
- Demonstrate understanding of drug therapy.
- Demonstrate ability to administer medication appropriately.

### Implementation

<table>
<thead>
<tr>
<th>Interventions and (Rationales)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>*Monitor respiratory function. (Drug worsens respiratory failure, asthma attacks.)</td>
<td>*Instruct patient to immediately report signs of respiratory distress to the health care provider.</td>
</tr>
<tr>
<td>*Monitor for concurrent use of systemic corticosteroids. (Can lead to suppression of adrenal function.)</td>
<td>*Instruct patient to completely disclose all other medications he/she is taking.</td>
</tr>
<tr>
<td>*Monitor for signs of infections. (Use with caution in patients with: tuberculosis, untreated fungal, bacterial or viral infections due to possible development of superinfection; ocular herpes simplex due to worsening of symptoms due to immune suppression.)</td>
<td>*Instruct patient to report signs of infection to the health care provider.</td>
</tr>
<tr>
<td>*Monitor for signs and symptoms of hypercorticism such as acne and hyperpigmentation (due to adrenal insufficiency.)</td>
<td>*Advise patient to inform health care provider if any weight gain, severe skin conditions occur, hyperactivity.</td>
</tr>
</tbody>
</table>
| *Provide humidification (to decrease crusting and drying of nasal passages.) | Instruct patient:  
  - to report irritation of nasal passages to health care provider.  
  - to wash cap and nosepiece with warm water after each use.  
  - that transient burning of the nasal passages as well as sneezing are common side effects. |
| *Observe for proper use of medication. | Instruct patient:  
  - in proper technique for use of nasal inhaler.  
  - to shake inhaler prior to use.  
  - medication will be most effective if nasal |
|  | passages are clear before use.  
|  | • to use only prescribed amount to avoid systemic side effects.  
|  | • that this medication does not provide immediate symptom relief.  

| **Evaluation of Outcome Criteria**  
| ---  
| Evaluate the effectiveness of drug therapy by confirming the patient goals and expected outcomes have been met (see “Planning”). |
## Nursing Process Focus
Patients Receiving Oxymetazoline (Afrin)

### Assessment
Prior to administration:
- Obtain complete health history including allergies, drug history and possible drug interactions.
- Assess for presence or history of nasal congestion due to allergic conditions, nasal surgery, middle ear infections (treatment and prevention.)

### Potential Nursing Diagnoses
- Risk for Injury (nosebleed), related to adverse effects of drug
- Ineffective Tissue Perfusion, related to adverse effects of drug
- Deficient Knowledge, related to drug action, side effects, and administration

### Planning: Patient Goals and Expected Outcomes
The patient will:
- Demonstrate an ability to use a nasal inhaler.
- Remain free from physical injury.
- Maintain effective tissue perfusion.
- Demonstrate knowledge of drug therapy.

### Implementation

<table>
<thead>
<tr>
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</tr>
</thead>
</table>
| *Evaluate pupil size and respiratory status before administration. (Drug stimulates alpha 1-adrenergic receptors that may cause constricted pupils and respiratory depression.) | Inform patient:  
  - that pupil constriction and respiratory depression may occur.  
  - to immediately report respiratory distress to the health care provider. |
| *Obtain history of diabetes mellitus. (Use cautiously in these patients due to possible interaction of drug with glucose-lowering agents.) | Instruct patient:  
  - to monitor their glucose levels frequently when on this medication.  
  - to notify their health care provider for any abnormalities in their results.  
  - they may need increased doses of glucose-lowering agents. |
| *Monitor compliance with medication regimen. (Rebound congestion will occur if medication is used for longer than 5 days due to prolonged use, patient must use more and larger doses of drug.) | Instruct patient:  
  - not to use medication longer than 5 days.  
  - to notify health care provider if rebound congestion occurs.  
  - in proper technique for administering nose drops.  
  - to wash hands before and after using nose drops.  
  - to rinse dropper in hot water after each use. |
| *Obtain history of hyperthyroidism: (Use cautiously in patients with hyperthyroidism due to central nervous system stimulation by drug’s effect that | *Instruct patient to report nervousness, shaking, tremors, fever, rapid heartbeat and breathing to the health care provider. |
| **possibility would cause an exacerbation of the disease process.** | **Advise patient:**
| Monitor vital signs, especially pulse and respiration. (Drug has cardiovascular effects by stimulation of alpha1-adrenergic receptors.) | • to use only the prescribed amount.
• to monitor blood pressure at same time daily and record.
• To report any abnormal results to health care provider. |

**Evaluation of Outcome Criteria**
Evaluate the effectiveness of drug therapy by confirming that patient goals and expected outcomes have been met (see “Planning”).
Nursing Process Focus:
Patients Receiving Epinephrine (Adrenalin)

Assessment
Prior to administration:
- Obtain complete health history including allergies, drug history and possible drug interactions.
- Assess for presence/history of anaphylactic shock, asthma, cardiopulmonary resuscitation simple glaucoma, ventricular fibrillation, croup, septic shock, wheezing.
- Obtain vital signs.

Potential Nursing Diagnoses
- Ineffective Tissue Perfusion, related to cardiovascular effects of drug
- Disturbed Sleep Pattern, related to CNS effects of drug
- Imbalanced Nutrition: Less than Body Requirements, related to anorexia secondary to drug
- Deficient Knowledge, related to drug action and side effects

Planning: Patient Goals and Expected Outcomes
The patient will:
- Demonstrate understanding of the risks and benefits of drug therapy.
- Maintain adequate tissue perfusion.
- Maintain adequate sleep.
- Demonstrate maintenance of weight within normal range.

Implementation

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>*Monitor vital signs and lung sounds, including croup and wheezing (to determine effectiveness of drug therapy.)</td>
<td>*Instruct patient to report changes in respiratory status to the health care provider.</td>
</tr>
<tr>
<td>*Monitor blood glucose. (Use with caution in patients with diabetes mellitus due to epinephrine’s effect of increasing hyperglycemia.)</td>
<td>*Advise patient to monitor blood glucose frequently during treatment.</td>
</tr>
<tr>
<td>*Obtain history of closed angle glaucoma. (Drug dilates the pupil, which may lead to worsening of condition.)</td>
<td>*Instruct patient to immediately report vision changes to the health care provider.</td>
</tr>
<tr>
<td>*Use with caution in patients with hyperthyroidism (due to exacerbation of thyroid crisis.)</td>
<td>*Instruct the patient to notify the health care provider if they experience; increased heart rate, fever, nervousness, tremors.</td>
</tr>
<tr>
<td>*Monitor cardiovascular status. (Cardiac arrhythmias may occur and may lead to ventricular fibrillation. Hypertensive crisis may occur.)</td>
<td>*Advise patient that cardiac monitoring will occur while receiving this medication.</td>
</tr>
<tr>
<td>*Monitor neurological status. (Drug may cause cerebral hemorrhage.)</td>
<td>*Instruct patient to immediately report the first signs of severe headache.</td>
</tr>
</tbody>
</table>

Evaluation of Outcome Criteria
Evaluate the effectiveness of drug therapy by confirming that patient goals and expected outcomes have been met (see “Planning”).