### Nursing Process Focus:
**Patients Receiving Atropine (Atropair, Atropisol)**

#### Assessment
Prior to administration:
- Assess for heart rate, blood pressure, temperature and elimination patterns (initially and throughout therapy).
- Obtain complete health history including cardiac, visual, pulmonary, GI, urinary disorders including blood studies: CBC, electrolytes, cardiac enzymes, BUN, creatinine. May include EKG, pulmonary functions, and chest x-ray.
- Obtain patient’s drug history to determine possible drug interactions and allergies.

#### Potential Nursing Diagnoses
- Deficient Knowledge, related to drug administration and effects related to new use of drug
- Decreased Cardiac Output, related to drug effect
- Risk for Imbalanced Body Temperature, related to side effect of drug
- Impaired Oral Mucous Membrane, related to effect of drug
- Constipation, related to decreased motility.

#### Planning: Patient Goals and Expected Outcomes
The patient will:
- Demonstrate expected outcomes of drug therapy and list reportable side effects.
- Experience no significant change in vital signs or level of consciousness.
- Demonstrate understanding of the drug’s action by accurately describing drug side effects and precautions.
- Maintain an effective pattern of gastrointestinal elimination.

#### Implementation

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<th>Interventions and (Rationales)</th>
<th>Patient Education/Discharge Planning</th>
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<td><em>Monitor patients with Down Syndrome for anticholinergic crisis. (These patients may be more sensitive to Atropine because the chromosomal distortions of Down Syndrome result in many functional abnormalities of major body systems, including the central nervous system, particularly the cholinergic and noradrenergic systems.)</em></td>
<td><em>Instruct patients and caregivers to report any symptoms of anticholinergic crisis including fever, tachycardia, difficulty swallowing, ataxia, reduced urine output, psychomotor agitation, confusion, hallucinations.</em></td>
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| *Monitor for signs of anticholinergic crisis, which result from overdosage: fever, tachycardia, difficulty swallowing, ataxia, reduced urine output, psychomotor agitation, confusion, hallucinations.* | *Instruct patients to report any symptoms of anticholinergic crisis.*
| *Observe for side effects such as drowsiness, blurred vision, tachycardia, dry mouth, urinary hesitancy, and decreased sweating. (These symptoms occur due to drug’s action on the ANS.)* | *Remember the simile: "Hot as Hades, Blind as a Bat, Dry as a Bone, Mad as a Hatter" as a guideline for reportable symptoms.* |

Instruct patient:
- to report side effects.
- to avoid driving until effect of medication is known.
- that oral rinses, sugarless gum or candy, and frequent oral hygiene may help relieve dry mouth.
- to avoid alcohol-containing mouthwashes which can further dry oral tissue.

*Caution patients that atropine impairs heat regulation. (Atropine can inhibit sweat glands secretions, due to direct blockade of the muscarinic receptors on the sweat glands. Sweating is necessary for patients to cool down and this can increase their risk for hyperthermia.)*

*Inform patient to limit activity outside when the temperature is hot. Strenuous activity in a hot environment may cause heat stroke.*

*Inform male patients with benign prostatic hypertrophy that atropine may cause urinary hesitancy and retention.*

*Instruct the patient to notify their practitioner if changes in urinary stream occur.*

*Monitor patients routinely for abdominal distention and auscultate for bowel sounds. (This is due to muscarinic blockade on the tone and motility of intestinal smooth muscle.)*

*Inform the patient to increase fluid and add bulk to the diet if constipation becomes a problem.*

*Use cautiously with the elderly or very young. Symptoms that might be more pronounced in the elderly are urinary retention, constipation, and blurred vision (due to normal aging). For the very young, body systems are not fully developed so assess all systems in order to decrease possible complications.*

*Inform patient and caregivers to report any adverse reactions to the 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”).