## Nursing Process Focus: Patients Receiving Sumatriptan

### Assessment
Prior to administration:
- Obtain complete health history including allergies, cardiac, renal, gastro-intestinal, biliary, and hematologic, including EKG, X-ray, tomography and laboratory studies: CBC, cardiac enzymes, BUN, creatinine, electrolytes, liver enzymes, etc.
- Obtain patient’s drug history to determine pain and analgesic usage patterns, possible hypersensitivity, possible pregnancy and lactation.
- Identify infectious agents or other factors responsible for inflammation or pain.
- Assess for LOC and pain before and after administration.

### Potential Nursing Diagnoses
- Acute Pain
- Deficient Knowledge, related to drug action and side effects
- Ineffective Coping, related to unrelieved pain
- Ineffective Health Maintenance, related to unrelieved pain

### Planning: Patient Goals and Expected Outcomes
The patient will:
- Report pain relief or a reduction in pain intensity.
- Demonstrate understanding of the drug’s action by accurately describing drug side effects and precautions.
- Immediately report effects such as shortness of breath, chest tightness or pressure, jaw pain, untoward or worsened rebound headache, seizures or other neurological changes.
- Demonstrate ability to manage health needs.

### Implementation

#### Interventions and (Rationales)

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Rationales</th>
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<tr>
<td><em>Monitor vital signs, especially blood pressure and pulse.</em> (Sumatriptan's systemic vasoconstrictor activity results in a rise in blood pressure and may result in arrhythmias or myocardial infarction.)</td>
<td><em>Instruct patients to monitor vital signs, especially blood pressure and pulse, ensuring proper use of home equipment.</em></td>
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<td><em>Keep resuscitative equipment accessible.</em></td>
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<td><em>Observe for changes in severity, character or duration of headache.</em> (Sudden severe headaches of &quot;Thunderclap&quot; quality can signal subarachnoid hemorrhage. Headaches which differ in quality and are accompanied by signs such as fever, rash, stiff neck, etc. may herald meningitis.)</td>
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<td><em>Monitor neurological status; perform neuro-checks regularly.</em> (Sumatriptan selectively reduces carotid arterial blood flow.)</td>
<td>Instruct the patient:</td>
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<td><em>Monitor changes in level of consciousness.</em></td>
<td>- that changes in the character of migraines could signal other potentially more serious disorders.</td>
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<td>- concerning warning signs of stroke.</td>
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<td>- regarding conditions such as meningitis which may cause headache.</td>
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#### Patient Education/Discharge Planning

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<td>Instruct the patient:</td>
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<td>- feeling dizzy or light-headed can be the result of the drug’s action on the CNS, OR coronary ischemia.</td>
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<td>Monitor for possible side effects: dizziness, drowsiness, warming sensation, tingling, lightheadedness, weakness or neck stiffness due to vasoconstriction. (Such symptoms can result from decreased blood flow to the brain related to reduced carotid arterial blood supply.)</td>
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| Advise patient:  
• to immediately report side effects to the health care provider.  
• Regarding emergent symptoms suggestive of stroke or myocardial infarction which may require immediate emergency intervention and transport to a hospital.  
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| *Monitor dietary intake of foods that contain tyramine such as pickled foods, beer, wine, aged cheese which may trigger migraines.  
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| *Monitor laboratory tests such as CBC, BUN, creatinine, urinalysis and liver enzymes to determine kidney and liver function.  
(Sumatriptan is metabolized in the liver and excreted by the kidneys; impaired organ function can increase serum drug levels.)  
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(Sumatriptan is metabolized in the liver and excreted by the kidneys; impaired organ function can increase serum drug levels.)  
| Instruct the patient:  
• to report nausea, vomiting, diarrhea, rash, jaundice, abdominal pain, tenderness, distention, or change in color of stool.  
• to adhere to laboratory testing regimen for serum blood level tests of liver enzymes as directed.  
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**Evaluation of Outcome Criteria**
Evaluate the effectiveness of drug therapy by confirming that patient goals and expected outcomes have been met (see “Planning”).