**Nursing Process Focus:**
**Patients Receiving Vincristine (Oncovin)**

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<th><strong>Assessment</strong></th>
<th><strong>Potential Nursing Diagnoses</strong></th>
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| Prior to administration:  
- Obtain complete health history including allergies, drug history and possible drug interactions.  
- Assess for presence/history of specific cancer, bone marrow depression, radiation treatment, herpes zoster or chicken pox, infection. |  
- Disturbed Body Image, related to alopecia and other side effects  
- Risk for Deficient Fluid Volume, related to diarrhea, vomiting secondary to side effects of vincristine  
- Imbalanced Nutrition: Less than Body Requirements, related to loss of appetite secondary to vincristine  
- Ineffective Protection, related to decreased WBC secondary to drug  
- Impaired Tissue Integrity, related to extravasation at IV site with resultant cellulites |

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<th><strong>Planning: Patient Goals and Expected Outcomes</strong></th>
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| Patient will:  
- Experience minimal adverse reactions to vincristine.  
- Demonstrate knowledge of mechanisms of action of vincristine.  
- Demonstrate knowledge of measures to decrease severity of side effects and increase comfort. |

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<th><strong>Implementation</strong></th>
<th><strong>Patient Teaching/Discharge Planning</strong></th>
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| **Interventions and (Rationales)** | **Instruct patient:**  
- to get regular liver function tests performed.  
- to report any signs of decreased liver function: yellowing of skin or whites of eyes, clay-colored stools. |
| *Monitor for decreased hepatic functioning. (Vincristine is metabolized in liver.) |  
*Monitor for infection. (Bone marrow suppression may occur, with resultant immunosuppression.) | **Teach patient and caregiver:**  
- methods to decrease exposure to infections: stay away from persons with URIs, decrease exposure to children, get adequate sleep, try to eat well-balanced diet.  
- to report any fever, increased fatigue, sore throat, etc. immediately. |
| *Monitor for symptoms of neurologic or neuromuscular side effects. (The most serious limiting adverse effects of vincristine relate to nervous system toxicity.) | **Advise patient and caregiver:**  
- of importance of complete physical exam prior to beginning vincristine therapy.  
- to monitor for sensory impairment (decreased sensations, vision or hearing), numbness or tingling of fingers or toes, ataxia and to report immediately. |
| *Monitor kidney function. (Vincristine may cause SIADH, evident by concentrated urine and retention of free water.) | Advise patient:  
• to increase fluid intake to 2-3 quarts/day.  
• symptoms of SIADH to report: decreased urination, darker color or strong odor to urine, weight gain.  
• that lower back pain may be 1st symptom of uric acid nephropathy and it must be reported immediately.  
• to be alert for and report increased or decreased urination, bed wetting: these may be symptoms of autonomic toxicity. |
|---|---|
| *Monitor baseline labs and periodic lab results during vincristine therapy, including hematocrit, hemoglobin, platelets, WBC. (Decreased blood counts put patient at higher risk for infection or fatigue.) | Teach patient:  
*importance of lab studies prior to and periodically during vincristine therapy.  
*energy conservation methods, such as frequent rest periods, planning activities during times of highest energy levels, allowing others to assist with chores, etc. |
| *Monitor bowel function. (Constipation is an early sign of toxicity. Administering water, laxative, stool softener before dose of vincristine may help decrease constipation. If fecal impaction occurs, patient may need enemas.) | Advise patient:  
• to report new episode of constipation immediately.  
• measures to decrease or eliminate constipation, including increasing fluids, fiber, etc. and to exercise if condition allows.  
• to report constipation or abdominal pain before taking laxative. |
| *Monitor for signs of alopecia. (Chemotherapeutic agents attack fastest growing cells in body, including hair cells.) | Advise patient:  
• that alopecia is temporary, and that hair will grow back once treatment is completed; hair may be different texture or color.  
• to get wig before actually needed, by making referrals to appropriate agency such as ACS. |
| *Monitor GI problems. (Antineoplastics attack fastest growing cells in body, which includes cells in GI tract.) | Teach patient and caregivers:  
• measures to obtain adequate nutrition, such as supplements, frequent small meals, high-calorie liquids, etc.  
• to take anti-emetic as soon as nausea occurs, not to wait until severe vomiting occurs. |
| *Monitor IV site for extravasation. (Can cause tissue necrosis secondary to severe irritation if medication gets into tissues.) | *Instruct patient to immediately report any pain, discomfort, redness, swelling at IV site during administration or after administration is complete. |
Monitor for herpes zoster or chickenpox. (If patient exposed, could experience severe case of the disease secondary to fact that patient’s decreased immune status does not allow ability to fight off any viral invasion.)

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<td>• to avoid vaccinations while receiving vincristine.</td>
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<tr>
<td>• to avoid persons with chickenpox.</td>
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<td>• that household members should not receive live virus vaccinations while patient is receiving vincristine.</td>
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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”).