**Nursing Process Focus:**  
**Patients Receiving Cyanocobalamin (Cyanabin)**

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Potential Nursing Diagnoses</th>
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| Prior to administration:  
  - Obtain complete health history including allergies, drug history and possible drug reactions.  
  - Assess vital signs.  
  - Assess for other causes of anemia | - Risk for Injury (weakness, dizziness, syncope), related to anemia  
- Ineffective Tissue Perfusion, related to adverse effects of drug  
- Deficient Knowledge, related to therapeutic regimen |

**Planning: Patient Goals and Expected Outcomes**

The patient will  
- report a decrease in symptoms of vitamin B₁₂ deficiency.  
- immediately report significant side effects such as dyspnea, palpitations, fatigue, muscle weakness, and dysrhythmias.  
- Demonstrate understanding of the drug’s action by accurately describing drug side effects and precautions.

**Implementation**

<table>
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<tr>
<th>Interventions and (Rationales)</th>
<th>Patient Education/Discharge Planning</th>
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| *Monitor vital signs.  
(Altered potassium levels and overexertion may produce cardiovascular complications especially irregular rhythm). | *Instruct patient to monitor pulse rate and report irregularities and changes in rhythm. |
| *Monitor potassium levels during first 48 hours of therapy.  
(Alterations in potassium level occur because conversion to normal red blood cell production increases the need for potassium.) |  
| *Monitor respiratory pattern.  
(Pulmonary edema may occur early in therapy related to a possible sensitivity to the medication. Reactions may take up to 8 days to occur.) |  
| *Monitor serum Vitamin B₁₂, RBCs and hemoglobin levels to determine effectiveness of medication.  
(Initial doses of B₁₂ stimulate rapid RBC regeneration and should return to near normal within 2 weeks.) |  
| *Assist patient to plan activities and allow for periods of rest to conserve energy. |  
| *Encourage patient to maintain adequate dietary intake of essential nutrients and vitamins. |  
| *Inform patient about the need for initial and intermittent laboratory blood monitoring.  
*Advise patient to keep all laboratory appointments.  
*Advise patient that treatment for pernicious anemia (usually IM injection) must be continued throughout life to prevent neurological damage.  
Instruct patient to:  
- rest when they begin to feel tired  
- avoid strenuous activities.  
Instruct patient:  
- that dietary management is not possible in |
treating pernicious anemia.
- to consume adequate dietary intake of essential nutrients and vitamins.

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<tr>
<th>*Monitor for side effects such as palpitations, fatigue, muscle weakness, and dysrhythmias.</th>
<th>*Teach patients to immediately report side effects to their healthcare provider.</th>
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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”).