### Assessment

- Obtain a complete health history including allergies, drug history, and possible drug interactions.
- Assess for the presence or history of vitamin A deficiency such as inadequate dietary intake, malabsorption diseases, and impaired liver function.
- Obtain baseline vision acuity examination.
- Assess integrity of skin and mucous membranes.
- Obtain serum vitamin A level, complete blood count (CBC), liver function profile, and serum protein and albumin levels.

### Potential Nursing Diagnoses

- Nutrition, Imbalanced: Less than Body Requirements
- Sensory Perception, Disturbed, related to vitamin A deficiency
- Skin Integrity, Impaired
- Knowledge, Deficient, related to drug therapy

### Planning: Client Goals and Expected Outcomes

The client will:
- Exhibit improvement in serum vitamin A level.
- Immediately report side effects such as increased nausea, vomiting, headache, loss of hair, lethargy, and malaise.
- Demonstrate an understanding of the drug’s action by accurately describing drug side effects and precautions.

### Implementation

#### Interventions and (Rationales)

- Monitor client’s diet to determine intake of vitamin A foods. (Deficient state may be caused by poor dietary habits.)
- Periodically monitor visual acuity. (Vitamin A may cause miosis, papilledema, and nystagmus.)
- Monitor for symptoms of vitamin A toxicity. (Storage of excess vitamin A can lead to hypervitaminosis.)
- Monitor for signs of increased intracranial pressure. (Vitamin A may cause increased intracranial pressure if taken in large doses.)
- Assess for use of mineral oil. (Mineral oil inhibits the absorption of vitamin A.)
- Monitor for drug interactions with oral contraceptives. (Concurrent use of vitamin A and oral contraceptives can cause toxic levels of vitamin A.)

#### Client Education/Discharge Planning

- Instruct client to:
  - Maintain a dietary log for 48 hours.
  - Eat foods rich in vitamin A such as egg yolks, butter, milk, liver, dark leafy vegetables, and orange fruits and vegetables.
- Advise client to report any changes in vision.
- Instruct client to:
  - Watch for signs and symptoms of vitamin A overdose such as nausea, vomiting, anorexia, dry skin and lips, headache, and loss of hair.
  - Immediately stop taking medication if signs of toxicity are noted.
- Instruct client to:
  - Follow dosage directions given by the healthcare provider or on the label.
  - Immediately report any changes in neurologic status such as increased sleepiness, headaches, lethargy, and malaise.
- Advise client to avoid laxatives that contain mineral oil.
- Instruct client to:
  - Adhere to medication schedule and avoid double doses of the vitamin.
  - Keep scheduled laboratory visits for testing if taking oral contraceptives.

### Evaluation of Outcome Criteria

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

- The client’s labs exhibit an improvement in vitamin A level.
- The client verbalizes side effects that require reporting.
- The client demonstrates an understanding of the drug’s action by accurately describing drug side effects and precautions.