Monitoring Anticoagulant Use

Problem

Anticoagulants are commonly used for a variety of reasons. In caring for patients, nurses should recognize that anticoagulants can increase the risk of bleeding and take steps to monitor and reduce associated risks and adverse reactions.

Consequence

Failure to correctly assess the risks of anticoagulant use can result in increased bleeding and related adverse effects.

Solution

Here are some considerations associated with anticoagulant use.

- Patients with a history of stroke or heart attack are given anticoagulants to reduce the risk of another episode.
- Inpatients who are bedridden may be placed on anticoagulants to prevent clot formation.
- Anticoagulants are used in the treatment of conditions like atrial fibrillation and deep vein thromboses.
- Anticoagulants work by a variety of mechanisms including blocking platelet and clotting activity.
- There are three types of anticoagulants – thrombin inhibitors, antiplatelet drugs, and clotting factor inhibitors.
- Inhibitors of thrombin block the activity of thrombin; heparin is a thrombin inhibitor.
- Antiplatelet drugs block the platelets from aggregating into clots; aspirin is an antiplatelet drug.
- Inhibitors of clotting factor synthesis are the third common anticoagulant; these drugs decrease the production of certain clotting factors of the liver, e.g., Coumadin.
• Due to potentially serious side effects, most blood thinners require a prescription, except Aspirin, which can be purchased over the counter.

• Although Aspirin does not need a prescription, its effects on bleeding can be severe; thus its use by a patient needs to be identified and monitored.

• All patients on anticoagulant medications are at increased risk for bleeding problems and need to take care to avoid any injuries.

• Individuals on anticoagulant medications should avoid sports and hazardous activities; falls or blows to the head should be reported immediately since they may result in serious bleeding.

• Those on anticoagulant drugs must take care with shaving and brushing / flossing their teeth.

• Patients on anticoagulant drugs bruise easily.

• Drugs such as Coumadin and heparin are routinely monitored through lab testing to maintain the correct therapeutic levels.

• Patients on anticoagulants should be educated to contact their doctor or seek medical treatment if they experience any of the following symptoms:
  ▪ Nosebleeds
  ▪ Bleeding gums
  ▪ Excessive amounts of bruising
  ▪ Heavy bleeding from wounds
  ▪ Heavy or unexpected menstrual periods
  ▪ Blood in the urine
  ▪ Cloudy or dark urine
  ▪ Black, tarry or bloody stools
  ▪ Vomiting blood / coffee grounds
  ▪ Pain or swelling in the abdomen
  ▪ Severe and constant headache
  ▪ Weakness or hemoptysis.

• Patients on anticoagulant therapy should be encouraged to wear a medical identification bracelet.
- Knowing that a patient is being treated with an anticoagulant will assist the nurse in diagnosing a patient with an unusual or obscure condition.

- Many patients, particularly the elderly, may not recall the names of their medications or understand when asked whether they are taking anticoagulants.

- Anticoagulants provide a number of benefits, but because of a narrow therapeutic window, they may cause adverse reactions as well.

References

*Avoiding Common Nursing Errors*, Lisa Marcucci, MD, Editor, Lippincott Williams and Wilkins, 2010