

## ANTIEPILEPTIC MEDICATIONS

|                          |  |
|--------------------------|--|
| Carbamazepine            |  |
| PRECAUTIONS/INTERACTIONS | Contraindicated in clients who have bone marrow suppression or bleeding disorders<br>Decreases the effectiveness of oral contraceptives and warfarin |
| SIDE/ADVERSE EFFECTS     | Anemia, leukopenia, Stevens-Johnson syndrome   |
| Gabapentin               |  |
| PRECAUTIONS/INTERACTIONS | Do not abruptly discontinue  |
| SIDE/ADVERSE EFFECTS     | Headaches, weight gain, nausea<br>Report CNS depression, seizures, visual changes, and unusual bruising  |
| Phenobarbital            |  |
| PRECAUTIONS/INTERACTIONS | Contraindicated in history of substance use disorder   |
| SIDE/ADVERSE EFFECTS     | Drowsiness, hypotension, respiratory depression  |
| Phenytoin                |  |
| PRECAUTIONS/INTERACTIONS | Causes increased excretion of digoxin, warfarin, oral contraceptives   |
| SIDE/ADVERSE EFFECTS     | Gingival hypertrophy, diplopia, drowsiness, hirsutism  |
| Valproic acid            |  |
| PRECAUTIONS/INTERACTIONS | Contraindicated in liver disease, pregnancy  |
| SIDE/ADVERSE EFFECTS     | Hepatotoxicity, teratogenic effects, pancreatitis  |

4. **Nursing Interventions and Client Education**
- Monitor for therapeutic effects.
  - Monitor clients taking phenytoin for toxic effects, including serum levels for toxicity.
  - Instruct clients regarding the importance of compliance; medication is treatment, not a cure.
  - Individualize treatment regimen.
  - Instruct client regarding side/adverse effects.
  - For status epilepticus: diazepam or lorazepam IV push followed by IV phenytoin or fosphenytoin.
- D. **Ophthalmologic Medications (Antiglaucoma)**
- Action:** Reduction of aqueous humor
  - Medications**
    - Levobunolol
    - Timolol
    - Pilocarpine
    - Latanoprost
  - Precautions/Interactions**
    - Use caution in clients taking oral beta blocker or calcium channel blocker.

- Side/Adverse Effects**
  - Systemic effect of beta blockers: bradycardia, heart failure, bronchospasm
  - Brown discoloration of the iris (latanoprost)
  - Retinal detachment (pilocarpine)
- Nursing Interventions and Client Education**
  - Instruct client to use sterile technique when handling applicator portion of the container.
  - Hold gentle pressure on the nasolacrimal duct for 30 to 60 seconds immediately after instilling drops.
  - Monitor pulse rate/rhythm for clients taking oral beta or calcium channel blocker.

## SECTION 12

### Medications for Pain and Inflammation

#### I NSAIDs

See "Section 10: Medications for the Musculoskeletal System."

#### II Acetaminophen

- A. **Action:** Slows production of prostaglandins in the CNS
- B. **Therapeutic Use**
- Analgesic
  - Antipyretic
- C. **Precautions/Interactions**
- Use caution in clients who consume three or more alcoholic beverages per day.
  - Concurrent use of rifampin, INH, carbamazepine, and barbiturates may increase hepatotoxic effects.
  - Slows the metabolism of warfarin.
- D. **Side/Adverse Effects**
- Nausea and vomiting
  - Long-term therapy: hemolytic anemia, leukopenia, neutropenia, and thrombocytopenia
- E. **Nursing Interventions and Client Education**
- Monitor liver function.
  - Monitor kidney function.
  - Be aware of OTC sources of acetaminophen.
  - Instruct client to take as prescribed and do not exceed 3,000 mg/24 hr.
  - Instruct client about risk of hepatotoxicity.
  - Administration to children should be based on age, not to exceed five doses per day (read labels carefully).
  - Treat acetaminophen overdose with acetylcysteine.

#### III Opioid Analgesics

- A. **Action:** Bind with opiate receptors in the CNS to alter the perception of and emotional response to pain
- B. **Medications**
- Fentanyl
  - Hydromorphone
  - Morphine sulfate
  - Meperidine
  - Codeine, oxycodone
- C. **Therapeutic Use**
- Relief of moderate to severe pain
  - Sedation
- D. **Precautions/Interactions**
- Meperidine is preferred for clients with biliary associated pain.
  - Monitor for potentiation of effects when given with barbiturates, benzodiazepines, phenothiazines, hypnotics, and sedatives.
- E. **Side/Adverse Effects**
- Orthostatic hypotension
  - Constipation
  - Urinary retention
  - Blurred vision
  - Respiratory depression
  - Abstinence syndrome
- F. **Nursing Interventions and Client Education**
- Monitor vital signs.
  - Monitor for respiratory depression.
  - Instruct client regarding administration with PCA pump.
  - Administer naloxone for clients who have respiratory depression.
  - Prevent constipation.
  - Monitor for urinary retention.

## SECTION 13

### Medications for the Reproductive System

#### I Contraception

- A. **Consider the following when providing client education and support regarding contraception.** Factors that influence choice of a contraceptive include:
- Age and health status, including risk for STI
  - Religion and culture
  - Plans for future conception
  - Frequency of intercourse
  - Number of sexual partners
  - Personal concerns about availability, spontaneity, ease of use

## CONTRACEPTION METHODS

|  |  |
|--|--|
| Rhythm method  |  |
| CONSIDERATIONS FOR USE                                     | Develop "fertile awareness" by noting:<br>Cervical mucus changes<br>Menstrual cycle pattern<br>Basal temperature   |
| CLIENT EDUCATION   | Do not have sexual intercourse during "fertile periods"<br>Low reliability for preventing pregnancy  |
| Oral contraceptives  |  |
| CONSIDERATIONS FOR USE                                     | Pill is taken daily<br>Adverse effects: breast tenderness, bleeding, nausea/vomiting   |
| CLIENT EDUCATION   | Antibiotic therapy, phenytoin and rifampin, reduce effectiveness<br>Avoid smoking  |
| Ethinyl estradiol and norelgestromin (contraceptive patch) |  |
| CONSIDERATIONS FOR USE                                     | Replace patch each week for 3 weeks  |
| CLIENT EDUCATION   | Apply patch to buttocks, abdomen, upper torso, upper/outer arm<br>Period will begin on week 4 (no patch)   |
| Medroxyprogesterone  |  |
| CONSIDERATIONS FOR USE                                     | Injection is administered every 3 months during menstrual cycle  |
| CLIENT EDUCATION   | Use backup form of birth control for 7 days after first injection<br>Fertility returns approximately 1 year after stopping   |
| Emergency contraception                                    |  |
| CONSIDERATIONS FOR USE                                     | A larger-than-normal dose of oral contraceptive<br>Taken no later than 72 hr after unprotected sex<br>Second dose is repeated 12 hr later<br>Antiemetics may be needed |
| CLIENT EDUCATION   | Should discuss options with provider<br>Should never be used as the primary method of birth control  |
| Etonogestrel, ethinyl estradiol vaginal ring               |  |
| CONSIDERATIONS FOR USE                                     | Placed deep into the vagina once every 3 weeks   |
| CLIENT EDUCATION   | One size fits most women<br>If falls out, rinse in warm water and replace within 3 hr<br>Remove ring during week 4; menses should begin                                |
| Intrauterine device (IUD)                                  |  |
| CONSIDERATIONS FOR USE                                     | Contraindicated for women with diabetes or history of PID<br>Risk of infection<br>May have cramping and heavier periods  |