

Study Guide for Medications for Joint and Bone Conditions for Nursing Students

Nonsteroidal Anti-Inflammatory Drugs (NSAIDs)

Common Medications: Ibuprofen (Advil, Motrin), Naproxen (Aleve, Naprosyn), Celecoxib (Celebrex)

Indications: Pain relief for osteoarthritis and rheumatoid arthritis, Inflammation reduction

Side Effects:

- Gastrointestinal upset (nausea, vomiting, diarrhea)
- Gastric ulcers
- Increased risk of bleeding
- Renal impairment

Nursing Considerations:

- Administer with food to minimize GI upset
- Monitor for signs of GI bleeding (e.g., tarry stools, hematemesis)
- Assess renal function (BUN, creatinine levels)
- Educate patients about the risk of long-term use

Disease-Modifying Antirheumatic Drugs (DMARDs)

Common Medications: Methotrexate (Rheumatrex), Sulfasalazine (Azulfidine), Hydroxychloroquine (Plaquenil)

Indications: Rheumatoid arthritis, Juvenile idiopathic arthritis

Side Effects:

- Bone marrow suppression
- Hepatotoxicity
- Risk of infection
- Retinal damage (specific to hydroxychloroquine)

Nursing Considerations:

- Regular monitoring of CBC and liver function tests
- Educate patients on the importance of regular eye exams (for hydroxychloroquine)
- Teach patients to report signs of infection promptly
- Advise against alcohol use to prevent liver damage

Bisphosphonates

Common Medications: Alendronate (Fosamax), Risedronate (Actonel), Ibandronate (Boniva)

Indications: Osteoporosis, Paget's disease of bone

Side Effects:

- Esophagitis
- Osteonecrosis of the jaw
- Hypocalcemia
- Atypical femur fractures

Nursing Considerations:

- Administer with a full glass of water in the morning before food or other medications
- Advise patients to remain upright for at least 30 minutes after taking to prevent esophagitis
- Monitor calcium levels
- Educate about dental hygiene and regular dental check-ups

Corticosteroids

Common Medications: Prednisone (Deltasone), Methylprednisolone (Medrol), Dexamethasone (Decadron)

Indications: Acute flare-ups of arthritis, Inflammatory conditions

Side Effects:

- Weight gain
- Hyperglycemia
- Increased risk of infection
- Osteoporosis with long-term use

Nursing Considerations:

- Monitor blood glucose levels, especially in diabetic patients
- Educate patients on the risk of infection and signs to watch for
- Encourage a diet high in calcium and vitamin D
- Taper off gradually, do not stop abruptly

Uric Acid Lowering Agents

Common Medications: Allopurinol (Zyloprim), Febuxostat (Uloric), Probenecid (Benemid)

Indications: Gout, Hyperuricemia

Side Effects:

- Rash
- Gastrointestinal upset
- Hepatotoxicity
- Renal stones (with probenecid)

Nursing Considerations:

- Encourage adequate hydration to prevent renal stones
- Monitor liver function tests
- Educate patients to avoid foods high in purines (e.g., red meat, shellfish)
- Teach patients to report any skin rashes immediately

Muscle Relaxants

Common Medications: Cyclobenzaprine (Flexeril), Baclofen (Lioresal), Methocarbamol (Robaxin)

Indications: Muscle spasms associated with musculoskeletal conditions

Side Effects:

- Drowsiness
- Dizziness
- Dry mouth
- Urinary retention

Nursing Considerations:

- Warn patients about potential drowsiness; advise against operating heavy machinery
- Monitor for signs of CNS depression
- Educate patients to increase fluid intake to manage dry mouth
- Assess urinary output

Supplements

Common Medications: Calcium carbonate (Caltrate), Vitamin D (Ergocalciferol)

Indications: Osteoporosis prevention and treatment, Support bone health

Side Effects:

- Hypercalcemia
- Constipation

Nursing Considerations:

- Monitor serum calcium levels
- Encourage dietary sources of calcium and vitamin D
- Advise patients to take supplements with meals to enhance absorption
- Educate about weight-bearing exercises to strengthen bones

Summary

Understanding the medications for joint and bone conditions, including their indications, side effects, and nursing considerations, is crucial for nursing students preparing for the NCLEX exam. Regular monitoring and patient education are key components of safe and effective medication management in these conditions.