meloxicam (mel-ox-i-kam)
Mobic, Mobicox
Classification
Therapeutic: nonsteroidal anti-inflammatory agents
Pharmacologic: nonopioid analgesics
Pregnancy Category C

Indications
Relief of signs and symptoms of osteoarthritis and rheumatoid arthritis (including juvenile rheumatoid arthritis).

Action
Inhibits prostaglandin synthesis, probably by inhibiting the enzyme cyclooxygenase.

Therapeutic Effects:
Decreased pain and inflammation associated with osteoarthritis. Also decreases fever.

Pharmacokinetics
Absorption: Well absorbed following oral administration.
Distribution: Unknown.
Protein Binding: 99.4%.
Metabolism and Excretion: Mostly metabolized to inactive metabolites by the liver via the P450 enzyme system; metabolites are excreted in urine and feces.
Half-life: 20.1 hr.

TIME/ACTION PROFILE
ROUTE ONSET PEAK† DURATION
PO unknown 5–6 hr 24 hr
†Blood levels

Contraindications/Precautions
Contraindicated in: Hypersensitivity; Cross-sensitivity may occur with other NSAIDs, including aspirin; Severe renal impairment (GFR < 15 mL/min). Concurrent use of aspirin (Risk of adverse reactions); Perioperative pain from coronary artery bypass graft (CABG) surgery; OB: Can cause premature closure of ductus arteriosus if used during third trimester.

NURSING IMPLICATIONS
Assessment
● Patients who have asthma, aspirin-induced allergy, and nasal polyps are at increased risk for developing hypersensitivity reactions. Assess for rhinitis, asthma, and urticaria.

Interactions
Drug-Drug: May ↑ antihypertensive effects of ACE inhibitors. May ↑ diuretic effects of furosemide or thiazide diuretics. Concurrent use with aspirin may ↓ meloxicam blood levels and may ↑ risk of adverse reactions. Concurrent use with disulfiramine may ↓ plasma lithium levels (close monitoring recommended when meloxicam is introduced or withdrawn). May ↑ risk of bleeding with anticoagulants, including warfarin. Concurrent use with sodium polystyrene sulfonate may ↑ risk of colonic necrosis; concurrent use should be avoided.

Route/Dosage
PO (Adults): 7.5 mg once daily; some patients may require 15 mg/day.
PO (Children 2–17 yr and ≥12 kg): 0.125 mg/kg once daily up to 7.5 mg/day.

Use Cautiously in: Cardiovascular disease or risk factors for cardiovascular disease (may ↑ risk of serious cardiovascular thrombotic events, myocardial infarction, and stroke, especially with prolonged use); Discontinuation (correct deficiencies before initiating therapy); Impaired renal function; Heart failure; Liver dysfunction; concurrent ACE inhibitors or diuretic therapy (may ↑ risk of renal dysfunction); Congestive heart failure or concurrent anticoagulant therapy (may ↑ risk of bleeding). Excretion: Safety not established. PO: Children: 2 yr (safety not established); Ger/: ↑ risk of GI bleeding and renal dysfunction.

Adverse Reactions/Side Effects
CV: Edema.
GI: GI bleeding, liver enzymes, diarrhea, dyspepsia, nausea.
Derm: Exfoliative dermatitis, Stevens-Johnson syndrome, toxic epidermal necrolysis, pruritus.
GU: Delayed ovulation.
Hemat: Anemia, leukopenia, thrombocytopenia.

Contraindicated in: Hypersensitivity, Cross-sensitivity may occur with other NSAIDs, including aspirin; Severe renal impairment (GFR < 15 mL/min). Concurrent use of aspirin (Risk of adverse reactions); Perioperative pain from coronary artery bypass graft (CABG) surgery; OB: Can cause premature closure of ductus arteriosus if used during third trimester.

C = Cardinal sign. H = Generic Implication. OPTIMA indicate hi-frequency, underline indicate most frequent. Strikethrough = Discontinued.
Potential Nursing Diagnoses

Lab Test Considerations: Evaluate BUN, serum creatinine, CBC, and liver function periodically in patients receiving prolonged therapy. May cause anemia, thrombocytopenia, leukopenia, and abnormal liver or renal function tests.

Bleeding time may be prolonged.

Potential Nursing Diagnoses

Acute pain (Indications)

Impaired physical mobility (Indications)

Implementation

Administration in higher than recommended doses does not provide increased efficacy but may cause increased side effects. Use lowest effective dose for shortest period of time.

PO: May be administered without regard to food.

Potential Nursing Diagnoses

Acute pain (Indications)

Impaired physical mobility (Indications)

Patient/Family Teaching

Administer the medication with a full glass of water and to remain in an upright position for 15–30 min after administration. Take missed doses as soon as remembered but not if almost time for the next dose. Do not double doses. Instruct patient to read the Medication Guide prior to use and with each Rx refill; new information may be available.

Caution patient to avoid the concurrent use of alcohol, aspirin, acetaminophen, or other OTC medications without consulting health care professional.

Instruct patient that meloxicam may increase the risk for heart attack and stroke; risk increases with longer use or in patients with heart disease.

Advise patient to inform health care professional of medication regimen prior to treatment or surgery, especially right before or after coronary artery bypass graft (CABG).

Advise patient to consult health care professional if rash, itching, visual disturbances, weight gain, edema, black stools, or signs of hepatotoxicity (nausea, fatigue, fever, jaundice, upper right quadrant tenderness, flu-like symptoms) occur.

Advise female patient to notify health care professional if pregnancy is planned or suspected or if breast feeding. Avoid if attempting to get pregnant.

Evaluation/Desired Outcomes

Relief of pain

Improved joint mobility. Patients who do not respond to one NSAID may respond to another.

Why was this drug prescribed for your patient?