delavirdine (de-lah-veer-deen)

Inscript

Classification
Therapeutic: antiretrovirals
Pharmacologic: non-nucleoside reverse transcriptase inhibitors

Pregnancy Category C

Indications
Treatment of HIV infection in combination with other antiretrovirals.

Action
Binds to reverse transcriptase, inhibiting viral DNA synthesis.

Therapeutic Effects:
Decreased viral load and increased CD4 cell count. Slowed progression of HIV infection and decreased severity of its sequelae.

Pharmacokinetics
Absorption: 85% absorbed after oral administration, increased when tablet is dispersed in water.

Distribution: Unknown.

Protein Binding: 98%.

Metabolism and Excretion: Extensively metabolized by the liver; 5% excreted unchanged in urine.

Half-life: 5.8 hr.

TIME/ACTION PROFILE (blood levels)
ROUTE ONSET PEAK DURATION
PO rapid 1 hr 8 hr

Contraindications/Precautions
Contraindicated in: Hypersensitivity; Concurrent use of pimozide, ergot alkaloids, alprazolam, midazolam, and triazolam.

Use Cautiously in: Impaired hepatic function; Achlorhydria (requires acidic environment for absorption); OB, Lactation, Pedi: Safety not established; HIV-infected patients should not breastfed.

Adverse Reactions/Side Effects
CNS: fatigue, headache.

GI: diarrhea, q amylase, q liver enzymes, nausea, vomiting.

Derm: rash, pruritus.

Misc: fat redistribution, immune reconstitution syndrome.

Interactions
Drug-Drug: Delavirdine inhibits the hepatic drug-metabolizing enzyme CYP3A4 and blood levels of midazolam, triazolam, alprazolam, or ergot alkaloids. Concurrent use is contraindicated. Concurrent administration with didanosine [T levels of both agents (separate doses by 1 hr). Concurrent use with other NNRTIs including efavirenz, nevirapine, ritonavir, and etravi- rine may lead to [T effectiveness and should be avoided. Fluoxetine and zidovudine may lead to [T levels of delavirdine. Antacids [do not use within 1 hr of each other]. May [T levels of amphetamines, amiodarone, lidocaine, flecainide, propafenone, calcium channel blockers, sodium, and verapamil. May [T transdermal levels. Antacids [absorption (do not use within 1 hr of each other). May [T levels of amphotericin B, propranolol, metformin, and warfarin. May [T levels of indinavir, nelfinavir, saquinavir, and nortriptyline. May [T levels of methadone. May [T levels of maraviroc. May [T levels of clarithromycin. May [T levels of methadone. May [T levels of fluoxetine. May [T levels of midazolam. May [T levels of verapamil.

Route/Dosage
PO (Adults): 400 mg 3 times daily.

NURSING IMPLICATIONS
Assessment
• Assess for change in severity of HIV symptoms and for symptoms of opportunistic infections throughout therapy.

• Monitor for development of rash, usually maculopapular and self-limited. May cause Stevens-Johnson syndrome or toxic epidermal necrolysis. Discontinue therapy if severe or accompanied with fever, general malaise, fatigue, muscle or joint aches, blisters, oral lesions, conjunctivitis, hepati- tis and/or eosinophilia.

• Cautious use in patients with diabetes mellitus.

Nursing Considerations

Cautious Use:
• Use with caution in patients with diabetes mellitus.

Laboratory Considerations:
• Monitor liver functions tests and blood glucose levels during therapy.

Patient Education:
• Advise patient to take delavirdine with or after food.

• Instruct patient to report any unusual bleeding, bruising, vomiting, diarrhea, paresthesias, confusion, stomach pain, or fever to health care professional immediately.

• Advise patient to avoid concurrent use of pimozide, alprazolam, midazolam, and triazolam.

• Instruct patient to take delavirdine exactly as directed. Swallow whole; do not crush or chew.

• Advise patient not to use any other OTC or Rx medication without consultation with health care professional.

• Instruct patient to report any new symptoms to health care professional immediately.

• Advise patient not to receive any vaccinations without advice of health care professional.

• Advise patient to use two forms of contraception during therapy with this drug.

• Advise patient to avoid breastfeeding during therapy.
Lab Test Considerations: Monitor viral load and CD4 cell counts regularly during therapy.

May cause:
- Serum AST and ALT concentrations.
- Neutrophil counts.

Potential Nursing Diagnoses
- Risk for infection
- Noncompliance

Implementation
- PO: Administer without regard to food. Tablets should be taken whole or dispersed in water. To prepare dispersion, add 4 tablets to at least 3 oz water and allow to stand for at least 5 minutes. Stir mixture until a uniform dispersion occurs. Dispersion should be consumed promptly, followed by rinsing the glass and swallowing entire rinse. Swallow 200 mg tablets whole; not readily dispersed in water.
- Do not administer within 1 hr of antacids or didanosine.
- Patients with achlorhydria should take delavirdine with an acidic beverage such as orange juice or cranberry juice.

Patient/Family Teaching
- Emphasize the importance of taking delavirdine as directed, at evenly spaced times throughout the day. Do not take more than prescribed amount and do not stop taking without consulting health care professional. Take missed doses as soon as remembered, do not double doses.
- Instruct patient to notify health care professional of all Rx or OTC medications, vitamins, or herbal products being taken and consult health care professional before taking any new medications.
- Instruct patient to use a nonhormonal method of birth control during delavirdine therapy. Advise female patients to avoid breast feeding during therapy with delavirdine.
- Advise patients that delavirdine does not cure AIDS or prevent associated opportunistic infections. Delavirdine does not reduce the risk of transmission of HIV to others through sexual contact or blood contamination. Caution patient to use a condom and avoid sharing needles or donating blood to prevent spreading the AIDS virus to others. Advise patients that the long-term effects of delavirdine are unknown at this time.
- Inform patient that redistribution and accumulation of body fat may occur, causing central obesity, dorsocervical fat enlargement (buffalo hump), peripheral wasting, breast enlargement, and bridge?ogen appearance. The cause and long-term effects are not known.
- Advise patients taking oral contraceptives to use a nonhormonal method of birth control during delavirdine therapy. Advise female patients to avoid breast feeding during therapy with delavirdine.
- Emphasize the importance of regular follow-up exams and blood counts to determine progress and monitor for side effects.

Evaluation/Desired Outcomes
- Delayed progression of AIDS and decreased opportunistic infections in patients with HIV.
- Improved CD4 cell count and decrease in viral load.

Why was this drug prescribed for your patient?