enfuvirtide (en-foo-veer-tide)

Fusion

Classification
Therapeutic: antiretrovirals
Pharmacologic: fusion inhibitors

Pregnancy Category B

Indications
Management of HIV infection in combination with other antiretrovirals in patients with evidence of progressive HIV-1 replication despite ongoing treatment.

Action
Prevents entry of HIV-1 into cells by interfering with the fusion of the virus with cellular membranes. Therapeutic Effects: Decreased replication of the HIV virus, slowed progression of HIV infection with decreased occurrence of sequelae. Improved CD4 cell count.

Pharmacokinetics
Absorption: 84% absorbed following subcutaneous administration.
Distribution: 5.5 L.
Protein Binding: 92% bound to plasma proteins.
Metabolism and Excretion: Broken down into component amino acids and then recycled in body pool.
Half-life: 3.8 hr.

TIME/ACTION PROFILE (blood levels)

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subcut</td>
<td>Unknown</td>
<td>8 hr</td>
<td>12 hr</td>
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Contraindications/Precautions
Contraindicated in: Hypersensitivity; Breast feeding not recommended for HIV-infected mothers.
Use Cautiously in: OB: Use only if clearly indicated; Pedi: Children 6 yr (safety not established).

Adverse Reactions/Side Effects

Interactions
Drug-Drug: None noted.

Route/Dosage
Subcut (Adults): 90 mg twice daily.
Subcut (Children 6–16 yr): 2 mg/kg twice daily (not to exceed 90 mg/dose).

NURSING IMPLICATIONS

Assessment
- Assess patient for change in severity of HIV symptoms and for symptoms of opportunistic infections throughout therapy.
- Assess patient for extracavitary reactions (pain, discomfort, induration, erythema, nodules and cysts, pruritus, ecchymosis). These are common, may require analgesics and limitation of physical activities.
- Assess patient for signs and symptoms of pneumonia (cough with fever, rapid breathing, dyspnea) during therapy. Notify health care professional immediately if these appear. Patients at higher risk for pneumonia include patients with low initial CD4 cell count, high initial viral load, IV drug use, smoking, and prior history of lung disease.
- Monitor patient for signs of hypersensitivity reactions (rash, fever, nausea and vomiting, chills, rigors, hypotension, elevated serum liver transaminases). If these occur, discontinue and do not restart enfuvirtide.
- Monitor viral load and CD4 cell count regularly during therapy.
- May cause eosinophilia, 5 serum amylase, lipase, triglycerides, ALT, AST, creatine phosphokinase, and GGT.

Potential Nursing Diagnoses
- Risk for infection (Indications)
- Noncompliance (Patient/Family Teaching)

Implementation
- Reconstitute vial with 1.1 mL of sterile water for injection and gently tap vial for 10 sec and roll between hands to avoid foaming and ensure all particles come in contact.
tact with the liquid and no drug remains on vial wall. Allow vial to stand until powder goes completely into solution; may take up to 45 min or roll vial gently between hands until completely dissolved. Solutions should be clear and colorless; do not administer solutions that are discolored or contain bubbles or particulate matter. Inject immediately or refrigerate for up to 24 hr after reconstitution. Bring to room temperature and inspect solution before administering. Discard any unused drug.

- **Subcut:** Administer in the upper arm, abdomen, or anterior thigh. Rotate sites; do not inject into sites with previous injection site reactions, moles, scars, bruises, or within 2 inches of the navel.

- **Syringe Incompatibility:** Do not mix other medications in the same syringe.

**Patient/Family Teaching**

- **Instruct patient on the correct technique for administering enfuvirtide. Review patient information sheet, preparation of dose, administration sites and technique, and disposal of equipment into a puncture-resistant container. First injection should be administered under supervision of a health care professional and technique should be re-evaluated periodically. Instruct patient to contact www.FUZEON.com or 1-877-4-FUZEON (1-877-438-9366) for more information.**

- **Emphasize the importance of administering enfuvirtide exactly as directed. Instruct patient to always be used in combination with other antiretroviral medications. Do not take more than the prescribed amount and do not stop taking without consulting health care professional. If a dose is missed, wait and administer next dose as regularly scheduled; do not administer two doses at same time. If too much is administered, notify health care professional promptly.**

- **Instruct patient that enfuvirtide should not be shared with others.**

- **Inform patient that enfuvirtide does not cure AIDS or prevent opportunistic infections. Enfuvirtide does not reduce the risk of transmission of HIV through sexual contact or blood contamination. Caution patient to use a condom and to avoid sharing needles or donating blood. Advise patient that the long-term effect of enfuvirtide is unknown at this time.**

- **May cause dizziness. Caution patient to avoid driving or other activities requiring alertness until response to medication is known.**

- **Instruct patient to notify health care professional if signs of injection site infection (oozing, increasing heat, swelling, redness, or pain), pneumonia, or hypersensitivity occur.**

- **Advise patient to notify health care professional if plans suspect pregnancy or if breast feeding.**

- **Emphasize the importance of regular follow-up exams and blood counts to determine progress and monitor for side effects.**

**Evaluation/Desired Outcomes**

- **Decreased replication of the HIV virus.**

- **Slowed progression of HIV infection with decreased occurrence of sequelae.**

- **Improved CD4 count.**

Why was this drug prescribed for your patient?