Dexrazoxane (Zinecard®, Totect®)

Pronounced: dex-ray-ZOX-ane

Classification: Cytoprotective agent

About Dexrazoxane (Zinecard®, Totect®)

Dexrazoxane works to protect your heart from the harmful effects of certain types of chemotherapy. Dexrazoxane is a potent "intracellular chelating agent," meaning that it inactivates certain metal ions in the body such as harmful free radicals. The mechanism by which dexrazoxane exerts its cardioprotective activity is not fully understood.

Dexrazoxane can also be used to minimize the damage to tissues if a certain type of chemotherapy medication (anthracycline) leaks out of the vein (extravasation) while it is being administered.

How to Take Dexrazoxane

When dexrazoxane injection is used to prevent heart damage caused by doxorubicin, it is given just before each dose of doxorubicin, by intravenous (IV, into a vein) infusion. When used to prevent tissue damage after extravasation, it is given once a day for 3 days, beginning no more than 6 hours after the leakage.

Possible Side Effects of Dexrazoxane

This medication was studied in conjunction with chemotherapy medications, making it difficult to determine if the side effects are truly caused by the dexrazoxane. Patients who received this medication had higher instances of low blood counts and changes in liver function tests than those who did not receive the medication. In addition, some experienced burning at the injection site. These side effects are discussed in more detail below.

Low White Blood Cell Count (Leukopenia or Neutropenia)

White blood cells (WBC) are important for fighting infection. While receiving treatment, your WBC count can drop, putting you at a higher risk of getting an infection. You should let your doctor or nurse know right away if you have a fever (temperature greater than 100.4°F or 38°C), sore throat or cold, shortness of breath, cough, burning with urination, or a sore that doesn’t heal.

Tips to preventing infection:

- Washing hands, both yours and your visitors, is the best way to prevent the spread of infection.
- Avoid large crowds and people who are sick (i.e.: those who have a cold, fever or cough or live with someone with these symptoms).
- When working in your yard, wear protective clothing including long pants and gloves.
- Do not handle pet waste.
- Keep all cuts or scratches clean.
- Shower or bath daily and perform frequent mouth care.
- Do not cut cuticles or ingrown nails. You may wear nail polish, but not fake nails.
- Ask your oncology care team before scheduling dental appointments or procedures.
- Ask your oncology care team before you, or someone you live with, has any vaccinations.

Low Red Blood Cell Count (Anemia)

Your red blood cells are responsible for carrying oxygen to the tissues in your body. When the red cell count is low, you may
feel tired or weak. You should let your oncology care team know if you experience any shortness of breath, difficulty breathing or pain in your chest. If the count gets too low, you may receive a blood transfusion.

**Low Platelet Count (Thrombocytopenia)**

Platelets help your blood clot, so when the count is low you are at a higher risk of bleeding. Let your oncology care team know if you have any excess bruising or bleeding, including nose bleeds, bleeding gums or blood in your urine or stool. If the platelet count becomes too low, you may receive a transfusion of platelets.

- Do not use a razor (an electric razor is fine).
- Avoid contact sports and activities that can result in injury or bleeding.
- Do not take aspirin (salicylic acid), non-steroidal, anti-inflammatory medications (NSAIDs) such as Motrin/Advil (ibuprofen), Aleve (naproxen), Celebrex (celecoxib) etc. as these can all increase the risk of bleeding. Please consult with your healthcare team regarding use of these agents and all over the counter medications/supplements while on therapy.
- Do not floss or use toothpicks and use a soft-bristle toothbrush to brush your teeth.

**Liver Toxicity**

This medication can cause liver toxicity, which your doctor may monitor for using blood tests called liver function tests. Notify your healthcare provider if you notice yellowing of the skin or eyes, your urine appears dark or brown or pain in your abdomen, as these can be signs of liver toxicity.

**Reproductive Concerns**

Exposure of an unborn child to this medication could cause birth defects, so you should not become pregnant or father a child while on this medication. Effective birth control is necessary during treatment. Even if your menstrual cycle stops or you believe you are not producing sperm, you could still be fertile and conceive. You should consult with your healthcare team before breastfeeding while receiving this medication.

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