



Mechlorethamine (Nitrogen Mustard, Mustargen®)

At the Clinical Center referred to as Nitrogen Mustard (NYE-troe-gin MUS-tard).

How Given: Intravenously (by vein)

Drug Action: Nitrogen mustard stops the growth of cancer cells by binding together or breaking apart the building blocks that form DNA. DNA is the genetic material in cells used to make new cells

Side Effects:

1. Severe nausea and vomiting can occur in a half hour after treatment and last up to 8 hours. Nausea can continue for 24 hours after treatment.
2. Bone marrow effects can include a temporary decrease in white blood cells, platelets, and red blood cells. These usually begin 1 week after treatment and can last 3 weeks.
3. Temporary hair thinning and hair loss can occur 2 to 3 weeks after treatment.
4. Headache, lightheadedness, or dizziness is less common, but can occur.

Special Instructions:

1. Tell your nurse immediately if the drug stings or burns during treatment. If the drug leaks out of the vein it can damage tissue. Prompt treatment is essential in order to minimize damage.
2. After treatment the veins in the arm can become sore, irritated, discolored, or hardened. A warm moist towel applied to the area 3 to 4 times a day provides comfort and promotes healing.

3. You may have a metallic taste in your mouth while receiving Nitrogen mustard or shortly afterwards. Hard candy, gum, or mints can help disguise this taste.
4. Do not drive a car, operate machinery, or perform any activities that require mental alertness until you know your reaction to this drug.
5. Do not take aspirin or aspirin-containing products unless prescribed by your NIH doctor.
6. Call your NIH doctor or nurse if you
 - have pain, swelling, or redness at the injection site following treatment
 - are unable to drink for more than 1 day or unable to eat for more than 2 days after treatment
 - have a temperature of 101.0 F (38.3 °C) at any time, or have a temperature of at least 100.4° F (38.0 °C) that lasts for 1 hour or occurs two times in a 24-hour period
 - have any unusual bleeding or bruising



This information is prepared specifically for patients participating in clinical research at the Warren Grant Magnuson Clinical Center at the National Institutes of Health and is not necessarily applicable to individuals who are patients elsewhere. If you have questions about the information presented here, talk to a member of your healthcare team.

Living with Cancer Chemotherapy Series
January, 1983; draft September, 1998
National Institutes of Health, CC
Nursing Department

Questions about the Clinical Center? OCCC@cc.nih.gov