



Poison HOTLINE

1-800-222-1222

June 2014



Did you know

Teens and young adults are experimenting with a new fad called **Beezin**, which consists of applying a light layer of Burt's Bees lip balm to the upper eye lids. The balm contains peppermint oil and the teens report it causes a tingling sensation. Users also report **Beezin** helps them stay awake when studying and that it adds to the euphoria when the person is drunk.

Peppermint oil is a very strong irritant and can cause a burning sensation along with inflammation. Accidental administration into the eye can be extremely painful and risks causing a bacterial infection – especially if the balm has been used on the lips as well.

Methotrexate

Methotrexate (MTX) is used to treat a wide variety of cancers and it is also used to treat patients with rheumatoid arthritis and severe psoriasis. MTX is also used “off-label” in the treatment of many other cancers and auto-immune diseases. Because of the highly toxic nature of this medicine, patients may experience toxicity following even therapeutic dosing. Typical poison cases involve either a child unintentionally ingesting the medicine or an adult inadvertently taking the MTX on a daily basis, rather than on a weekly basis, as normally prescribed.

In overdose, the effects of MTX are noticed primarily in organ systems with rapidly dividing cells, specifically the bone marrow and GI tract. Nausea and vomiting may begin within hours; severe ulcerative stomatitis (breakdown and swelling of mouth and lips) may develop within a few days. Bone marrow suppression typically develops in 6-9 days post-exposure and may last 2 weeks. Serial CBC and platelet counts should be monitored in overdose patients until there is evidence of bone marrow recovery.

Leucovorin (folinic acid, the active form of the vitamin folate) is the primary antidote for a patient who receives an overdose of MTX. Intravenous leucovorin should be given as soon as possible after the overdose, ideally within 1 hour, and at a dose equal to or greater than the dose of MTX the patient was given. Do not wait for serum MTX concentration results before starting treatment with leucovorin. IV leucovorin should be dosed every 3-6 hours for several days—while monitoring MTX level. It is not recommended to give leucovorin intrathecally as it can cause neurotoxicity. Note: Folic acid is **not** an effective antidote for MTX toxicity.

Glucarpidase is used as a rescue therapy to inactivate MTX. Glucarpidase must be used in conjunction with leucovorin, however it should be given more than 2 hours before or 2 hours after leucovorin administration. MTX levels within 48 hours following glucarpidase administration can only be reliably measured by a special lab method due to interference from MTX metabolites. Measurement of MTX levels within 48 hours of glucarpidase administration using standard immunoassays can overestimate the MTX concentration.

*Tammy Noble RN, BSN, CSPI
Certified Specialist in Poison Information*

POISON
Help
1-800-222-1222



Post and share this edition of **Poison Hotline** with your colleagues. Send comments or questions to Poison Hotline, 712-234-8775 (fax) or Tammy.Noble@UnityPoint.org. To subscribe or unsubscribe from this distribution list, contact the IPCC education office at 712-279-3717. Read past issues of **Poison Hotline** at www.iowapoisson.org.