

## Patient Fact Sheet

# MISTLETOE

**EUROPEAN MISTLETOE**, or *Viscum album*, is a semi-parasitic plant that grows on oaks and other trees in Europe and Asia. The leaves, twigs and berries are used to make herbal medicines. Medicinal doses of mistletoe are very small, and it can be poisonous in larger doses. Mistletoe preparations used in Europe include Iscador<sup>®</sup>, Helixor<sup>®</sup>, and Plenoso<sup>®</sup>. In Europe mistletoe is sometimes given by injection (shot), but in the United States it is usually taken as a tea or tincture (alcohol concentrate). The main active ingredients are called *lectins*.

American mistletoe is a different plant. It can also be poisonous.

### WHAT IS IT USED FOR?

- ◆ In Europe, mistletoe products are used to treat cancer that has not responded to standard treatment.
- ◆ Mistletoe is also sometimes used with other herbs to treat high blood pressure.

### WHAT HAVE STUDIES SHOWN?

- ◆ Injections (shots) of mistletoe extracts make kinds of infection-fighting cells work better.
- ◆ In animal studies, mistletoe preparations helped fight some kinds of cancer.
- ◆ Studies in people with cancer have been small and poorly designed, and their results have been mixed. More studies are needed to show whether mistletoe helps treat cancer. Most American cancer doctors do not use or recommend mistletoe.
- ◆ There are no studies showing whether mistletoe by itself helps high blood pressure.

### WHAT ARE THE SIDE EFFECTS?

Side effects may include:

- ◆ Allergic reactions including swelling at the site of a mistletoe shot.
- ◆ Upset stomach vomiting, diarrhea, chills, fever, headaches, chest pain, and low blood pressure.
- ◆ Overdoses of the mistletoe plant or mistletoe products can cause severe poisoning including seizures, coma and death. Even a few leaves or berries can cause poisoning, so never eat part of a mistletoe plant and keep mistletoe and mistletoe products away from children.

(continued)

## **WILL IT INTERFERE WITH MY OTHER MEDICATIONS OR MY MEDICAL CONDITION?**

- ◆ Mistletoe is not recommended for people with tuberculosis and other chronic (long-term) infections.
- ◆ People with high blood pressure or heart disease should be careful when using mistletoe because it may cause changes in blood pressure or cause problems with blood pressure medicines.
- ◆ People who take monoamine oxidase (MAO) inhibitors (a kind of anti-depressant) should not take mistletoe because it contains tyramine.

## **IS IT SAFE FOR CHILDREN AND PREGNANT WOMEN?**

- ◆ Mistletoe is traditionally not used during pregnancy, because it might cause contractions.
- ◆ It is not used for children and there are no studies to show whether it is safe for children or women who are breastfeeding.

## **WHAT ARE TYPICAL DOSAGES?**

Doses vary widely. Talk to a knowledgeable doctor or herbalist for information about proper dosages.

## **WHAT ELSE DO I NEED TO KNOW?**

- ◆ Always tell your doctor or nurse practitioner if you are taking any herbal product, and before starting any new one. Your health care provider needs to know everything you are taking to help you make decisions about your health care. Herbs can cause problems with other herbs, dietary supplements, or medications.
- ◆ Herbal products may contain chemicals or other species of plants.

## **SEE ALSO:**

- ◆ OnHealth.com: <http://onhealth.com/alternative/resource/herbs/item%2C16029.asp>
- ◆ University of Texas Center for Alternative Medicine Research in Cancer: <http://www.sph.uth.tmc.edu/utcam/summary/mistletoe.htm>
- ◆ Home: <http://www.mcp.edu/herbal/default.htm>