Poisoning by Household Plants R. J. Oenbrink DO Family Practice Tequesta, FL

The holiday season will soon be with us. In an effort to keep a happy season free from unpleasant memories, I would like to review some of the problems that can be caused by various plants that may be used for decorative purposes. There are many myths about the toxicities of certain members of the plant family that may or may not be toxic. If there is any question regarding plant toxicity, please call Poison Control (800) 282-3171 or your local hospital emergency department (both places have charts with the pictures of toxic plants as well as their toxicities).

<u>Euphorbia</u> contains the common Poinsettia, a plant that seems to symbolize Christmas. In spite of many myths, the only toxicity is from the sap which may cause skin irritation and the fact that if the leaves are eaten nausea and vomiting may occur.

<u>Ilex</u> is the parent of the popular Holly. The berries can cause severe nausea, vomiting and diarrhea if they are chewed, intravenous fluid replacement may be needed. The leaves contain caffeine as well as other compounds that may be irritating.

<u>Taxus</u> is the genus that includes the Yew. This is an evergreen, so it may be popular for decorative purposes during the holidays, but it is extremely toxic (especially the seeds). Some feel that the fruit may be safe in small quantities. Livestock have been killed by grazing on it. The plant contains alkaloids that cause severe nausea, vomiting, dry mouth, dizziness, abdominal cramping, weakness, cardiac arrhythmias, respiratory distress and convulsions. Treatment includes hospitalization for GI decontamination and aggressive control of seizures. Interestingly, this plant has recently found to have compounds very effective in treating ovarian cancer.

<u>Cicuta</u> includes the Hemlock which may be mistaken for parsnips, potatoes or carrots. Children have been poisoned by using the hollow stems as peashooters. Intense GI distress is followed by seizures and coma. Treatment is similar to that used with *Taxus*.

<u>Phytolaca</u> with the Pokeweed and Pigeonberry causes nausea, vomiting, headache, and low blood pressure. It should not be handled without wearing gloves.

<u>Dieffenbachia</u>, <u>Philodendron</u>, <u>Pothos</u>, and <u>Spathiphylum</u> all contain calcium oxalate which can produce intense inflammation, swelling and burning of the skin and mouth. Problems are treated by removing the material from the victims mouth and washing the victims mouth out with water. <u>Schlefflera</u> (Queens Umbrella) also contains oxalates and is treated similarly.

<u>Capiscum</u> comprises Cayenne, Christmas, Chili, Hot & Jalapeno peppers. Obviously, the fruit of this plant is very handy in moderation, but it can cause inflammation of the

skin, mouth and eyes. The best antidote is a good washing (use soap if its only on the skin).

<u>Toxicodendron</u> includes the ever-popular Poison Ivy, Oak & Sumac. The culprit behind the toxicity is a chemical called urushiol. This compound initiates an immune-type of response in its victims, people exposed for the very first time will not have a problem with it. After the first exposure however, the body mounts an immune response against further exposures in the form of swelling, inflammation and rash. Eating the plant or inhaling fumes from burning plants can be life threatening. Even petting an unaffected long-haired pet can allow the sap to cause you problems. Sensitive patients may also cross-react to mango, cashew and Japanese lacquer. Treatment usually includes antihistamines and steroids, although if the urushiol containing sap is immediately washed off with soapy water reactions may be prevented.

<u>Pyracantha</u> (Firethorn) berries can cause nausea, vomiting and diarrhea. It's thorns can also cause injury.

<u>Solanum</u> (Bittersweet, Fellen, Deadly Nightshade) is actually part of the potato and eggplant family. The plants taste bitter initially, then unpleasantly sweet. The plants have had long use in preparing healing poultices, but should not be eaten. Gastric irritation, fever, vomiting and diarrhea with a scratchy throat can result. Treatment includes inducing vomiting or pumping the stomach followed by activated charcoal to absorb the toxin. IV fluids may be needed to correct dehydration.

<u>Saintpaulia</u> or the African Violet is the final plant we will cover. In spite of myths, it has not been shown to be toxic.

Remember that most accidental plant poisonings occur at home. Try to keep plants out of the reach of inquisitive children who may be visiting for the holidays. Teach children that they should never place part of a plant in their mouths, or handle parts of plants unless an adult gives them permission. It is always a good idea to be familiar with the common plants in your home and neighborhood. Ideally, you would know the common and botanical names of your plants (although most emergency departments have charts that show the toxic species). Never assume a plant is safe to eat just because animals or birds are eating it (they sometimes have different metabolism that allow them to eat things that you cannot).

Also, even nonpoisonous plants can be dangerous; a child can choke on a seed, stem, leaf or small piece of fruit.

Pictures of the plants mentioned are available at most garden stores or libraries.