

POISONOUS PLANTS OF TURKEY

Week 4

General Information

Many of the toxic secondary metabolites, synthesized in plants, have medical importance.

In many sources, toxic plants are classified according to their toxicity

Aesculus hippocastanum Less Toxic

Tanacetum vulgare Moderately
Toxic

Conium maculatum Highly Toxic

It is difficult to determine the exact degree of toxicity of a plant.

Because the toxic effect of the plant is affected by factors such as the age and weight of the poisoned person as well as the environment and development stage of the plant.

In some development stages of some plants, the toxic substance contents may be differ.

Phytolacca americana
(Pokeweed)

Young shoots are not poisonous, roots and berries are poisonous

The level of the toxic component may differ in a family or even in a single plant.

For example, many plants in the Solanaceae family are poisonous.

While each part of the *Atropa belladonna* is toxic, *Lycopersicon esculentum* (tomato) does not contain toxic alkaloids only in its fruits.

DIAGNOSIS OF THE POISONOUS PLANT

- **In the case of any poisoning, the scientifically correct diagnosis of the plant is of vital importance in the correct treatment.**
- **The name of the scientific Latin binominal should also be determined, since the general known name of the plant may lead to inaccuracies.**

TO PREVENT PLANT POISONING;

- **Children should not be allowed to put any part of plant (shoot, fruit, flower, leaf) into their mouths and should be informed about the dangers of poisonous plants.**
- **The common and scientific names of the plants in the environment should be learned and informed about their potential hazards. Information should be obtained about the exotic plants which taken for insight decoration purposes.**
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- **Poisonous plants should be placed at home inaccessible to children and pets.**
- **Unknown plants that are not fully recognized should never be used in the kitchen and in home treatments.**

- **It should not be forgotten that heating and cooking wont always let the toxic components inactive.**

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It should be kept in mind that if a plant eaten by an animal doesnt mean it is nontoxic.

FACTORS AFFECTING POISONING

-Plant type

-The plant organ is toxic and the density of the toxic compounds

- Form and duration of contact with the plant**
- The age, body weight, diseases, allergic factors of the exposed person.**

- **The organ metabolizes the poison**
- **Variation of toxic compounds of a plant species in different populations.**

Important informations that should be provided to relevant institutions/organizations or people for the correct diagnosis of the poisonous plant

- Which part of the plant has been eaten?
- What kind of fruit is the fruit? (berry, nut ..)
- What is the dimensions, color, structure (watery, fleshy, dry, hard) of the plant?
- How many seeds the fruit has?
- What is the arrangement of fruits on the plant? (individually, in pairs, in the form of bunch, stalked or not).
- Other parts of the plant?(root, branch, leaf ..)
- What is the life form, appearance and size of the plant? * (grass, tree, shrub, herbaceous, woody, small, large, thin / thick trunk tree)
- Leaves? (round, ovate, simple, partial.) *
- A digital photograph of the plant can be used for diagnosis.

Important informations that should be provided to relevant institutions/organizations or people for the correct diagnosis of the poisonous plant

- **Information about the patient (age, gender, weight).**
- **Details of the symptoms of poisoning.**
- **How much of the poisonous plant/plant part is consumed?**
- **What kind of interventions are made?**

**IF YOU DISCOVER THAT A PERSON HAS EATEN A
POISONOUS PLANT,**

Don't panic, but act quickly!

Remove any remaining plant parts from the mouth and give the patient a small amount of water!

Call The National Poison Information Center!
(= UZEM; Tel: 114)