

Learning unit: Phytotherapy

Impact of the learning unit:

Patients tend to use herbal preparations more and more often. Physicians should, therefore, be aware of the most common medicinal herbs, their active substances, reasonable use, and risks. Identifying reliable sources of information is also an important skill because the internet sources could offer unreliable, misleading, or hoax information potentially dangerous to patients. Poisonings by toxic plants and mushrooms are still happening, so it is necessary for a physician to know which plants or mushrooms are the most frequent causes of poisoning in his/her region, how to diagnose, consult, and treat a poisoning case.

Important terms

pharmacognosia

natural drugs

active substances

- primary metabolites

- secondary metabolites

- examples of active substances with pharmacological effects

 - mucilages

 - alkaloids – tropane, ergot, opium, and vinca alkaloids

 - flavonoids

 - tannins

 - bitter principles

 - essential oils

 - saponins

 - cardioactive glycosides

types of herbal preparations

- herbal medicinal products

 - marketing authorisation process

- food supplements

 - market launch process

examples of medicinal herbs and their reasonable use

- valerian (*Valeriana officinalis*)

- marshmallow (*Althaea officinalis*)

- chamomille (*Matricaria recutita*)

- witch hazel (*Hamamelis* sp.)

- senna (*Cassia angustifolia*)

- liquorice (*Glycyrrhiza glabra*)

examples of poisonous plants and mushrooms

- belladonna (*Atropa belladonna*)

- lilly-of-the-valley (*Convallaria majalis*)

- yew (*Taxus* sp.)

- herb-paris (*Paris quadrifolia*)

- foxglove (*Digitalis* sp.)

- castor oil plant (*Ricinus communis*)

- mezereum (*Daphne mezereum*)

periwinkle (*Vinca minor*)
death cap (*Amanita phalloides*)
danther cap (*Amanita pantherina*)

algorithm of poisoning treatment
 see learning unit 28.2. General principles of poisoning therapy
toxicology information centre

Learning outcomes

Student estimates potential use of a medicinal herb based on its main active substance. Student identifies reliable sources of information about herbal medicines and medicinal herbs. Student can advise on the use of medicinal herbs in selected non-serious diseases. Student explains potential risks of self-treatment with plants and knows the most important poisonous plants and mushrooms.

Recommended study materials

Study materials of the course aVLFA0822c and aVLFA0822p.

Exam questions

There are no specific exam questions on this topic. Drugs of natural origin are incorporated into other learning units.