

FAFP1 Pharmaceutical care I

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# DERMATOLOGY

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# Information about skin

- ❑ The biggest part of human body
- ❑ Body surface **1,6 – 2 m<sup>2</sup>**
- ❑ Weight 3 kg, with fatty tissue more than 20 kg
- ❑ Skin contents cca 70 % of water
  
- ❑ ***Epidermis*** (cuticle) – stratum corneum
- ❑ ***Dermis*** – elastic, collagen fibers, mast cells, vascular and nerve fibers

# Skin functions

## Protective

## Barrier

- acid pH, Langerhans cells as a part of immune system

## Thermoregulatory

- vasoconstriction and vasodilatation, sweat formation – cooling

## Sensory

- receptors for press, touch, nociceptors, thermoreceptors

## Resorption and excretion

- Sebaceous glands

## Vitamin D production

- After sunlight

# Dermatological drugs

- Medicines for the treatment of skin disease
  - ▣ Local treatment
  - ▣ Systemic treatment
- The effect of the therapy depends on the pharmaceutical form, lipophilic properties, molecular size and concentration of active substance
- The medicine absorption is affected by age, sex, skin hydration, application site

# Dermatology medicines

- Emollients and protectives
- Antiseptics and disinfectants
- Antifungals
- Antivirotics
- Antipsoriatics
- Anti-acne preparations
- Antiphlogistics
- Antiectoparasitics

# Emollients

Soften, smoothen, skin hydratation

- Urea
- Lactic acid
- Ointment base



Bath oils (Balneum hermal, Balmandol oil, Linola-Fett-Olbad)

Emulsions, creams (Excipial U, Linola, Lipobase)

**How to use it?**

# Antimycotics

- ❑ Infections caused by pathogenic fungi and yeast
- ❑ The most frequent pathogens
  - ❑ Candida
  - ❑ Pityrosporum
  - ❑ Microsporum
  - ❑ Trichophyton
- ❑ Affected areas: nails, (onychomycosis), hair, feet, vaginal mucosis
- ❑ Frequent complication of diabetes mellitus

# Antivirotics



Herpes simplex skin infections

HPV infections

Warts



# Antipsoriatics

- Psoriasis vulgaris
  - quite common disease (2 – 3 % populace)
  - Autoimmune disease
- It causes cells to build up rapidly on the surface of the skin.
- The extra skin cells form scales and red patches that are itchy and sometimes
  - ▣ Type I
  - ▣ Type II

# Acne



- ❑ Skin condition that occurs when hair follicles become plugged with oil and dead skin cells
- ❑ Usually appears on face, neck, chest, back and shoulders
- ❑ Most common among teenagers

# Eczema - Atopic dermatitis

- Inflammatory skin disease
- long lasting (chronic) and tends to flare periodically.
- It may be accompanied by asthma or hay fever

# Scabies

- an itchy skin condition caused by a tiny burrowing mite called **Sarcoptes scabiei**
- The presence of the mite leads to intense itching in the area of its burrows
- The urge to scratch may be especially strong at night.



# Head lice

- Tiny insects that feed on blood from the human scalp
- most often affects children
- direct transfer of lice from the hair of one person to the hair of another



# Conclusions

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Treatment of skin diseases must be complex

Individual therapy is needed

Causal therapy is often unknown