

## ABSTRACT

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Title of diploma thesis: Topic and systemic treatment of acne vulgaris

*Acne vulgaris* is a skin disease affecting the hair follicles and sebaceous glands. The disease manifests itself by increased sebum production, non-inflammatory (comedones) and inflammatory lesions (papules, pustules, nodules, cysts). It occurs predominantly in adolescents, but may persist into adulthood. It is a multifactorial disease, which is caused by several factors (internal and external stimuli). The major pathogenetic factors include increased sebum production, hyperkeratosis, *P. acnes* colonization and inflammation present. First, it is necessary to diagnose the type of acne in order to choose the right and effective therapy, because there is not only one type of acne. There are many types and variants of acne, and although they show similar symptoms (affecting the follicles of sebaceous glands), their cause often differs. There is no uniform classification system for *acne vulgaris* and it varies between authors. Some authors classify *acne vulgaris* according to severity into mild, moderate and severe, others into comedonic, papulopustular, nodulocystic and conglobate acne. Drugs used in acne therapy contain substances from different pharmacological groups and thus affect the acne pathogenesis by different mechanisms. Therapy will be chosen depending on the type and severity of the acne, which targets the cause of the acne. It will reduce inflammatory and non-inflammatory lesions and will not create new lesions. Administration of topical drugs will usually be sufficient for mild to moderate acne, including drugs containing topical retinoid, an antibiotic, benzoyl peroxide, azelaic acid and salicylic acid. Systemic treatment is used in severe forms of acne or in manifestations not responding to topical treatment, including oral isotretinoin, an antibiotic and in women hormonal contraceptives. Acne treatment is long-term, when maintenance therapy is also needed.