

ABSTRACT

Charles University in Prague

Faculty of Pharmacy in Hradec Králové

Department of Pharmacology and Toxicology

Candidate: Petra Konečná

Supervisor: Doc. MUDr. Radomír Hrdina, CSc.

Title of diploma thesis: Pharmacotherapy of glaucoma

Glaucoma is one of the main causes of blindness in the world and its prevalence is progressively increasing. An early detection and an effective therapy are very important to prevent progression of this disease. Ways of treatment involve pharmacotherapy and laser or surgical interventions. The diploma thesis is concerned with pathophysiology, classification and detection of glaucoma. The main part focuses on a medical treatment, especially on individual groups of medications, which are used from the initial stage of the disease to maximally tolerated doses. Prostaglandin analogs, which are currently used as the first line of therapy and which are used with other medications in fixed or unfixed combinations, are described in detail. Glaucoma is unfortunately incurable but it is possible to prevent its exacerbation and an irreversible loss of sight. The thesis follows up and summarizes results from international studies dealing with an effect, an effectiveness and side effects of single groups of medications. The purpose was to organize new observations in one complex and to provide information about a serious disease, which is often underestimated.