ABSTRACT

Charles University, Faculty of Pharmacy in Hradec Králové Department: Department of Pharmacology and Toxicology Supervisor: PharmDr. Eduard Jirkovský, Ph.D. Author: Andrea Petríková Title of Diploma Thesis: Migraine and its treatment

Migraine is one of the primary headaches, manifested in repeated attacks of severe one-sided and throbbing headaches, usually lasting 4-72 hours. They are accompanied by one of the following symptoms: photophobia, phonophobia, odorophobia, nausea, vomiting. From one seizure to the next, the patient feels like a healthy patient.

In my work I describe current pharmacotherapeutic procedures in the treatment of migraine. In the first part of the diploma thesis, I presented a literature review of migraines, which begins with the classification of headaches. I continue with the definition of migraine, history, classification of migraine, pathophysiology, prevalence and diagnostic criteria of migraine.

In the second part I describe the different types of treatment with their procedures and the drugs that are used. Based on our knowledge of the pathophysiology of migraine, new drugs have been developed for the treatment of acute migraine attacks that target calcitonin gene-related peptide (CGRP) and serotonin 5-HT1F receptors. I describe their mechanism, which drugs have been developed, how they work.

The first important step is a correctly determined diagnosis. Adequate treatment selection develops from her. Examinations with EEG, CT, MR do not show any structural changes in the brain and give negative results.

The disease I describe in my work has negative effects on the patient's life. He has a very serious health, social and economic problem for the patient. Therefore, there is still an urgent need for more specific and stronger drugs, while minimizing side effects.

Key words: headache, migraine, migraine treatment, triptans, monoclonal antibodies