Abstract

The bachelor thesis is a review focused on colorectal cancer (CRC), its incidence, prevention, treatment, but especially on the methods of diagnosis that help to detect this disease.

In the first part of the thesis, the colon is anatomically and histologically described. Next is presented the disease of the CRC, its origin, occurrence, symptoms, prevention, and finally treatment options.

In the next part, the work focuses on specific methods of diagnosis. One of the most effective method for early detection of cancer is a screening program that uses the methods of examination of occult bleeding into the stool and colonoscopy. Colonoscopy itself is considered to be the gold standard for the diagnosis of CRC. Despite the development of new and more modern methods for diagnosis, colonoscopy is still one of the most widely used and most reliable methods. Furthermore, radiological methods, especially computed tomography (CT) or magnetic resonance imaging (MRI), are described. These methods have made a great move towards detecting lesions more accurately and earlier. These methods are also still often combined with colonoscopy to provide a more comprehensive and detailed picture for diagnosis. These new methods, such as virtual colonoscopy, positron emission tomography combined with CT (PET/CT), or hepatobiliary contrast agents in MRI are also described in this thesis.

The aim of this thesis is to review the currently used methods for the diagnosis of CRC, but also to look back at some methods that are no longer used so frequently.

Keywords: colorectal cancer, colon, cancer, diagnosis, colonoscopy, endoscopic methods, radiological methods