

ABSTRACT

The Charles University, Pharmaceutical faculty in Hradec Králové

Department: Department of biology and medical science

Author: Anna Maierová

Supervisor of the bachelor thesis: PhDr. Zděňka Kudláčková, Ph.D.

Headline: Haemostasis and haemocoagulation

Background:

Main aim of the work: One of the goals was to provide an overview of the basic knowledge about homeostasis and haemocoagulation in their physiological aspects. Another goal was to elaborate information on the pathophysiology of homeostasis and haemocoagulation with broader focus on clinical signs. Part of my work included itemizing current examination methods and procedure of the proper sampling and analysing the sample for haemocoagulation check-up as well.

Main findings:

This bachelor thesis presents the whole process of hemostasis, characterizes its components and its main importance so that it is clear how their deficiency or functional pathology affects the process of bleeding arrest. An integral part of the thesis is a review of basic methods for the diagnosis of disorders in haemostasis and, last but not least, a description of pathological conditions of haemostasis. Part of the thesis also focuses on hemostasis disorders associated with COVID-19 infection. It mentions the increasing incidence of thrombotic conditions with the greatest emphasis on COVID-19 associated coagulopathy. Conclusions:

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From the overview of methods and techniques presented after the characterization of the whole haemostasis process, it is evident how nowadays there is more and more automation not only in haemostasis examinations. As the number of automated devices increases, so do the demands on the professionals who must be able to operate them. Larger laboratories, which find it worthwhile to purchase more expensive equipment due to the higher number of samples to be

tested, must also have sufficiently trained and educated staff who are able to handle the equipment competently.

Keywords: Haemostasis, vessel wall, erythrocytes, coagulation factors, fibrinolytic factors, inhibitors, haemocoagulation testing, bleeding states, CAC, thrombotic states.