

UNIVERZITA KARLOVA V PRAZE

2. lékařská fakulta

Oddělení klinické hematologie ve FN Motol

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Detection of functional disorders of platelets using the PFA device in comparison with conventional aggregometry

Bachelor work

Abstract

The theme of this work is to compare two devices designed for measuring functional disorders of platelets – the PFA device and the aggregometer. The PFA device was introduced recently and measures closure time of capillary in a special cartridge. The measurement takes place in a whole blood sample. Aggregometer is used for stimulation of platelet aggregation by the inductors. The measurement takes place in platelet rich plasma. This work compares results of patients whose blood samples were measured on both devices. It figures out whether the results of the devices match and describes their advantages and disadvantages. The work leads to conclusion that is appropriate to use both devices for complementary results in the laboratory. Comparison of patient samples demonstrates that patients with reduced percentage of aggregation have also prolonged capillary closure time.