UNIWERSYTET MEDYCZNY IM. KAROLA MARCINKOWSKIEGO
W POZNANIU

Katedra i Zakład Fizjologii

Human Physiology

Exercise: Blood Group Serology

Instructor: Joanna Bartkowiak-Wieczorek

1. Prerequisites (knowledge students should have before starting the exercise):
    a. Blood Group Serology
    b. Antigens: definition, classification, examples, chemical and biological characteristics.
    c. Immunoglobulins (antibodies): structure, types, biological characteristics, and clinical significance.
    d. Blood group systems – ABO, Rh: inheritance of ABO and Rh system genes, location of antigens and antibodies, characteristics of antibodies, and Landsteiner's rules.
2. Special Requirements: Protective clothing (lab coat) is mandatory.
3. Scope of the Exercise
    a. Blood Group Serology
    b. Incompatibility and serological conflict in the ABO system.
    c. Incompatibility and serological conflict in the Rh system.
    d. Hemolytic disease of the newborn.
    e. Principles of blood transfusion compatibility – serological compatibility testing (cross-match test).
    f. Determining blood group.
    g. Determining bleeding time using the Duke method.
    h. Estimating coagulation time on a basic microscope slide.
4. Literature:

a. Silverthorn, D.U. *Human Physiology: An Integrated Approach*, Global Edition.

5. Knowledge of the basic and exercise-specific material is required to pass the topic. Additionally, students are expected to be familiar with the content discussed during the classes.