

Performance teaching plan

Transfusiology and transplantology

Academic year 2023/2024

Leader teaching: Jadranka Knežević, MD, PhD.

The Transfusiology and Transplantology teaching is a compulsory subject in the fifth year of the Department of Surgery at the Faculty of Medicine of the University of Mostar with 20 hours (7 hours of lectures, 5 hours of seminars and 8 hours of exercises). The teaching is conducted in the premises of the University Clinical Hospital Mostar.

Objective of the teaching:

Demonstrate and adopt the basic knowledge and skills in the field of Transfusion and Transplantology necessary for a doctor of medicine.

Teaching content:

Everything about donating whole blood and donor apheresis, safe blood.

Definition of voluntary blood donor.

Blood testing after collection from a voluntary donor

Testing of patients who need to be prescribed a blood product and pregnant women

Immuno-hematological blood tests (ABO blood group, Rh factor, other blood group systems, indirect and direct Coombs test, cross test/compatibility test.

Testing for blood-borne diseases: Hepatitis B (HBsAg), Hepatitis C (anti HCV), AIDS (anti HIV, HIV Ag, ) Syphilis (*Treponema pallidum*).

Production of blood products (erythrocyte concentrate, platelet concentrate, fresh frozen plasma, washed erythrocytes, washed platelets, V group, filtered (leukodepleted preparations), pathogen inactivation, irradiated and their preservation.

Issuance of blood preparations according to the patient.

Treatment with blood products, post-transfusion reactions, haemovigilance

Transplantation medicine, HLA tissue typing, cross match, bone marrow stem cell donor register and collection of stem cells from peripheral blood

Autologous and allogeneic bone marrow transplantation

Transplantation of solid organs

Obligations of students:

Teaching is conducted in the form of lectures during which the teacher explains the topic and encourages active and critical thinking of students and participation in the discussion. Teachers and students discuss the specifics and problems within each topic covered. Attendance records are kept for each student. At the end of the class there is a written final exam.

Tem , number and form of  
teaching unit

Topics, lectures, seminars, exercises and literature

Lecture 1,2      History of transfusiology  
                         Blood donation,  
                         Blood preparations (indications and application)

Seminar 1      Blood transmit diseases

Literature: This edition first published 2021

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Denise Harmening- Modern blood banking&Transfusion practices

(selected chapters)

Notes from lectures, seminars and exercise

Exercises 1,2,

Lecture 3,4

Blood groups ABO and Rh D and other blood group systems

Direct (DAT), Indirect (ICT) Coombs test, crossover test

Post-transfusion reactions, side effects of transfusion treatment

Seminar 2,3,4

Hemolytic disease of the newborn

The role of transfusion medicine in the treatment of patients

Hemostasis

Exercises 3,4,5

Lecture 5, 6, 7 Transplantology, history

Bone marrow stem cell donor registry

Post-transplantation reactions, side effects

Autologous and allogeneic bone marrow transplantation

Transplantation of solid organs

Seminar 5 HLA tissue typing, crros match, blood groups ABO and Rh D and other

blood group systems, molecular aspect

Exercises 6, 7,8

Literature:

Notes from lectures, seminars and exercise

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**23.01.2024. Tuesday**

9,00-9,45	Lecture 1	History of transfusiology
9.45-10.30	Lecture 2	Blood donation, indications and application
10,30-11,15	Seminar 1	Blood-transmit diseases
11,15-12,00	Break	
12,00-12,45	Exercises 1	
12,45-13,30	Exercises 2	
13.30-14.15	Exercises 3	

**24.01.2024. Wednesday**

9,00-9,45	Lecture 3	Blood groups ABO and Rh D and other blood group systems
9.45-10.30	Lecture 4	Direct (DAT), Indirect (ICT) Coombs test, crossover test Post-transfusion reactions, side effects of transfusion treatment
10.30-11.15	Seminar 2	Hemolytic disease of the newborn

11.15-12.00 Seminar 3 The role of transfusion medicine in the treatment of patients

12.00- 12.45 Seminar 4 Hemostasis

12.45-13.30 Break

13.30-14.15 Exercises 3

14.15-15.00 Exercises 4

### **25.01.2024.Thursday**

9,00-9,45 Lecture 5 Transplantology, history

9.45-10.30 Lecture 6 Bone marrow stem cell donor registry

10.30-11.15 Lecture 7 Post-transplantation reactions, side effects

Autologous and allogeneic bone marrow transplantation

11.15.-12.00 Transplantology in transfuziology

Transplantation of solid organs

12.00-12.45 Break

12.45-13.30 Seminar 5 HLA tissue typing, crros match, blood groups molecular method

13.30-14.15 Exercises 6

14.45-15.00 Exercises 7

15.00-15.45 Exercises 8

Lectures and seminars will be held at the School of Medicine.

Mostar **on January 23-25, 2024.**

The exercises would be done at the Transfusion Center SKB Mostar

The exam will be held on Friday, January 26, 2024. according to agreement (The proposal is at 10 a.m. at the Faculty of Medicine in Mostar - secure space).

## Exam

The final exam is a written and oral exam for a higher grade.

The student succeeds on the basis of the solved questions on the test, of which 50% of the correct answers to the questions in the test must be satisfied in order to pass

A= 91-100% 5 (excellent)

B = 79 to 90% 4 (very good)

C = 67 to 78% 3 (good)

D = 55 to 66% 2 (sufficient)

F = 0 to 54% 1 (insufficient)

## Literature:

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Notes from lectures, seminars and exercise