

*Department of Pediatrics № 1, Odesa National Medical University
Elective course "Critical conditions in neonatology.
Practicing communication skills on simulation equipment"*

MINISTRY OF HEALTH OF UKRAINE
ODESSA NATIONAL MEDICAL UNIVERSITY

Faculty: medical

(faculty name)

Department of pediatrics №1

(name of department)

APPROVE

Acting pro-rector for scientific and educational work

prof. _____

Svitlana KOTIUZHYNska

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2022 y

**METHODICAL RECOMMENDATION OF THE SEMINAR LESSON
FROM THE SELECTIVE EDUCATIONAL DISCIPLINE**

Faculty medical, course 5 _____

Selective educational discipline: "Critical conditions in neonatology. Practicing communication skills on simulation equipment."

(name of academic discipline)

Seminar class №__1__ Topic: Hemolytic disease of newborns

(topic name)

Approve:

Meeting of the Department of Pediatrics №1 _____

Odessa national medical university

Protocol №__1__ of " __29__ " __08__ 2022 y__ .

Head of the department _____ (Mykola ARYAYEV)

(signature)

(name, surname)

Developers:

Department of Pediatrics № 1, Odesa National Medical University

Elective course "Critical conditions in neonatology.

Practicing communication skills on simulation equipment"

(indicate surnames, scientific degrees, scientific titles and positions of developers; everyone who teaches the specified academic discipline must be among the developers)

Developers:

Prof. Mykola ARYAYEV as. of prof. PhD Ludmila SENKIVSKA, Irina TALASHOVA,
Daria USENKO, Natali BYSHLEI

(name of academic discipline)

Note. In the case of publication of methodological developments as an independent printed work, the academic council of the faculty provides a recommendation for publication in the presence of two reviews, one of which is external — from a reviewer of another institution of higher education.

Seminar lesson № 1____

Topic: Hemolytic disease of newborns.

Purpose: Deepening of knowledge in issues of etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, substantiation of clinical diagnosis obtained in the process of studying the subject; promoting the development of creative thinking. The ability to logically express and argue one's thoughts, to listen to each other, to criticize productively.

Basic concepts: Hyperbilirubinemia, hourly increase in bilirubin, bilirubin encephalopathy.

Equipment: newborn baby dummy.

Study time: 3 hours.

Plan

- I. Organizational moment (greetings, checking those present, announcing the topic, the purpose of the lesson, motivating applicants to study the topic).
- II. Control of basic knowledge (frontal survey on basic terminology).

Questions to check basic knowledge on the topic of the seminar:

1. Definition and classification of hemolytic disease of the fetus and newborns.
2. Stages of bilirubin metabolism in the body.
3. Risk factors of hemolytic disease of the newborn (HDN). Etiology.
4. Principles of HDN diagnosis according to the Rh- system and AB0 system. Kramer's scale. Use of nomograms to assess the level of bilirubin and determine indications for phototherapy and exchange blood transfusion.
5. Clinic of nuclear jaundice, edematous, anemic, jaundiced and mixed forms of HDN.
6. Prevention of hemolytic disease of the fetus and newborn. Forecast.

III. Discussion of theoretical issues:

1. Definition and classification of hemolytic disease of the fetus and newborns.
2. Stages of bilirubin metabolism in the body.
3. Risk factors of hemolytic disease of the newborn (HDN). Etiology.
4. Principles of HDN diagnosis according to the Rh- system and AB0 system. Kramer's scale. Use of nomograms to assess the level of bilirubin and determine indications for phototherapy and exchange blood transfusion.
5. Clinic of nuclear jaundice, edematous, anemic, jaundiced and mixed forms of HDN.
6. Prevention of hemolytic disease of the fetus and newborn. Forecast.

Discussion of theoretical issues can take place in the form of role-playing, answers to questions, debates, discussions, presentations with reports, abstracts, discussion of reports and abstracts, review of applicant answers, etc.)

Themes of role play/reports/ summeries

1. Definition and classification of hemolytic disease of the fetus and newborns.
2. Risk factors of Hemolytic disease of the newborn (HDN). Etiology.

3. Principles of diagnosis of HDN according to the Rh- system and AB0 system. Kramer's scale. Use of nomograms to assess the level of bilirubin and determine indications for phototherapy and exchange blood transfusion.
4. Clinic of nuclear jaundice, edematous, anemic, jaundiced and mixed forms of HDN.
5. Prevention of hemolytic disease of the fetus and newborn. Forecast.

When preparing a report, role-play, abstract, analytical review, etc., applicants can, along with this, prepare didactic visual aids in the form of tables, code diagrams, slides, drawings, portraits of famous specialists, preparations, etc.).

IV. Summing up

List of recommended literature

1. Nelson Textbook of Pediatrics / Edition 2 volume set. Edition: 21st, 2019.
2. Avery's Diseases of the Newborn Book Tenth Edition •2018.Copyright © 2018 Elsevier Inc. All rights reserved/ No of pages 1656.
<https://www.sciencedirect.com/book/9781437701340/averys-diseases-of-the-newborn>
3. Neonatal Hematology Pathogenesis, Diagnosis, and Management of Hematologic Problems Publisher: Cambridge University Press, 2021, pp. 133 - 154
DOI: <https://doi.org/10.1017/9781108773584.011>
4. Liumbruno, GM, D'Alessandro, A, Rea, F, et al. The role of antenatal immunoprophylaxis in the prevention of maternal-foetal anti-Rh(D) alloimmunisation. Blood Transfus 2010;8:8–16.Google Scholar PubMed
5. Maisels, MJ, Stevenson, DK, Watchko, JF. Care of the Jaundiced Neonate (New York: McGraw Hill, 2012).Google Scholar
6. Lawicki, S, Covin, RB, Powers, AA. The Kidd (JK) Blood Group System. Transfus Med Rev 2017;31:165–72.CrossRefGoogle Scholar PubMed

Electronic information resources

1. <http://moz.gov.ua>
2. <http://pediacalls.com/e-books/nelson-textbook-of-pediatrics-21st-edition/>
3. <https://www.ama-assn.org/about>
4. <https://www.who.int/>
5. <https://www.ipa-world.org/>