

*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 KOTIUZHYNKA
" " 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 № 4 Topic: Meconium aspiration syndrome
(topic name)

Approve:

Meeting of the Department of Pediatrics №1 _____

Odesa national medical university

Protocol № 1 of " 29 " 08 2022 y .

Head of the department (signature) (Mykola ARYAYEV)
(signature) (name, surname)

Developers:

Department of Pediatrics № 1, Odesa National Medical University

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(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.

Topic: Meconium aspiration syndrome.

Purpose: Deepening of knowledge in issues of etiology, pathogenesis, diagnosis, differential diagnosis, treatment, prevention of meconium aspiration syndrome and mastering the skills of providing emergency care to newborns born inactive with meconial waters on simulation equipment.

Basic concepts: respiratory disorders, respiratory failure, tracheal intubation

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. Adverse risk factors during pregnancy that affect the occurrence of meconium aspiration syndrome.
2. Diagnosis and clinical signs of meconium aspiration syndrome.
3. Rational feeding of a child with meconium aspiration syndrome.
4. Providing emergency care to a child born inactive with meconium waters.
5. Treatment, respiratory support for meconium aspiration syndrome.
6. Prevention of meconium aspiration syndrome in newborns, complications and prognosis.

III. Discussion of theoretical issues:

1. Etiology and pathogenesis of meconium aspiration syndrome in newborns.
2. Assessment of the severity of respiratory disorders in newborns according to the Silverman-Andersen, Dovnes and WHO scales. Diagnosis and clinical signs of meconium aspiration syndrome.
3. Differential diagnosis of meconium aspiration syndrome with RDS, transient tachypnea, congenital pneumonia.
4. Providing emergency care to a child born inactive with meconium waters.
5. Treatment, respiratory support for meconium aspiration syndrome.
6. Prevention of meconium aspiration syndrome in newborns, complications and prognosis.

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/ summaries

1. Etiology and pathogenesis of meconium aspiration syndrome in newborns.
2. Assessment of the severity of respiratory disorders in newborns. Diagnosis and clinical

- signs of meconium aspiration syndrome.
3. Differential diagnosis of meconium aspiration syndrome with RDS, transient tachypnea, congenital pneumonia.
 4. Providing emergency care to a child born inactive with meconium waters.
 5. Treatment, respiratory support for meconium aspiration syndrome.
 6. Prevention of meconium aspiration syndrome in newborns, complications and prognosis.

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. Copyright © 2018 Elsevier Inc. All rights reserved/ No of pages 1656
<https://www.sciencedirect.com/book/9781437701340/averys-diseases-of-the-newborn>
3. Fischer, C.P.; Rybakowski, C.; Ferdynus, C.; Sagot, P.; Gouyon, J.B. A Population-Based Study of Meconium Aspiration Syndrome in Neonates Born between 37 and 43 Weeks of Gestation. *Int. J. Pediatr.* 2012, 2012, 321545. [CrossRef]
4. Swarnam, K.; Soraisham, A.S.; Sivanandan, S. Advances in the Management of Meconium Aspiration Syndrome. *Int. J. Pediatr.* 2011, 2012, 1–7. [CrossRef]
5. Gandhi, C.K. Management of Meconium-Stained Newborns in the Delivery Room. *Neonatal Netw.* 2018, 37, 141–148. [CrossRef] [PubMed]
6. Glaser, M.A.; Hughes, L.M.; Jnah, A.; Newberry, D. Neonatal Sepsis: A Review of Pathophysiology and Current Management Strategies. *Adv. Neonatal Care* 2021, 21, 49–60. [CrossRef]
7. Polin, R.A.; Carlo, W.A.; Committee on Fetus and Newborn; American Academy of Pediatrics. Surfactant Replacement Therapy for Preterm and Term Neonates With Respiratory Distress. *Pediatrics* 2013, 133, 156–163. [CrossRef]
8. Perlman, J.M.; Wyllie, J.; Kattwinkel, J.; Wyckoff, M.H.; Aziz, K.; Guinsburg, R.; Kim, H.S.; Liley, H.G.; Mildenhall, L.; Simon, W.M.; et al. Neonatal Resuscitation Chapter Collaborators. Part 7: Neonatal Resuscitation: 2015 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science With Treatment Recommendations. *Circulation* 2015, 132 (Suppl. 1), S204–S241. [CrossRef]

Electronic information resources

1. <http://moz.gov.ua>

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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/>
6. <https://www.cdc.gov/nhsn/pdfs/pscmanual/6pscvapcurrent.pdf>
7. https://cdn.intechopen.com/pdfs/44446/intech-neonatal_pneumonia.pdf.html