University of Niš Faculty of Medicine

Study program: INTEGRATED ACADEMIC STUDIES OF MEDICINE



ACCREDITATION 2018

Course: Clinical pathology	
Course head: prof. dr Maja Jovičić Milentijević	
Course status:	Elective
Semester: X	Study year: V
ECTS: 3	Course code: M-V-44.v

Course purpose:

Acquisition of knowledge about:

- embryonal and fetal development periods, blastopathies, embryopathies, and fetopathies;
- perinatal pathology and pathology of the placenta
- morphology and mechanisms of pathological processes as the basis of diseases in newborns and children;
- histochemical types of muscle fibers, pathological changes in neuromuscular diseases, and mechanisms of their development and clinical expression;
- tumors (neoplasms) of different histogenesis, macroscopical and microscopical structure, molecular basis, multistep cancerogenesis, to clinical characteristics;
- laboratory diagnosis of tumora and diagnostic methods in pedopathology and neuromuscular pathology.

Course outcome: (knowledge, skills, attitudes)

Upon completion of the exam, students will:

- understand pathological disease basis in newborns, children, and human neuromuscular diseases;
- understand the rola and place of oncopathology in clinical medicine and practice;
- know the general principles of routine and contemporary diagnostic methods in pathology, and the factors influencing their reliability and selection;
- have gained knowledge in pedopathology, neuromuscular pathology, and oncopathology, necessary for the integration of all disease aspects from the molecular level to clinical manifestations, being ready to successfully attend clinical courses, especially pediatrics and oncology.

No. of classes of active teaching: 45

Lectures: 15 Practice: 30

Course content

Theory

Periods of embryonal and fetal development, prenatal (antenatal) and perinatal pathology and systemic infections (pre-, peri-, and postnatal). Pathology of the placenta. Congenital anomalies, hydrops fetalis, and syndrome of sudden infant death. Histochemical types of muscle fibers, general pathology of the peripheral nerves and muscles, and neuromuscular diseases.

General and special pathology of tumors (neoplasms) of different histogenetic origin in children and adults. Diagnostic methods in pedopathology, neuromuscular pathology and oncopathology, and their significance in clinical practice.

Practice

Analysis of macro- and micromorphological pathological processes that constitute the basis of disease of organs and systems of newborns and children, from congenital, inflammatory, immune, to neoplastic processes, interpretation of the causes and mechanisms of their development and interconnectedness of morphology and function – pathological correlation.

Histochemical typization of muscle fibers, morphofunctional aspects of the motor unit, investigation and interpretation of pathological changes in neuromuscular diseases, significance of histochemical and enzymohistochemical and contemporary methods in diagnosis, therapy, course, and prognosis.

Analysis and interpretation of macro- and microscopical structure of tumors of different histogenesis and localization, use of methods and criteria relevant for precise tumor diagnosis, determination of histologic grade and stage, and clinical-pathological correlation. Clinical significance of autopsy and special perinatal autopsy.

3. Seminars

Seminar topics are formulated at tiple beginning of classes from the contents of practical teaching.

Recommended literature:

- 1. Mihailović D, Stojanović D. Osnovi pedijatrijske patologije. Medicinski fakultet Univerziteta u Nišu, Prosveta, Niš, prvo izdanje, 2003.
- 2. Atanacković M, Bacetić D, Basta-Jovanović G i sar. Patologija, Medicinski fakultet Univerziteta u Beogradu, Libri Medicorum, Beograd, 2003.
- 3. Kumar V, Abbas AK, Aster JC. Robbins and Cotran Pathologic Basis of Disease. 15th ed, Elsevier Saunders, Philadelphia, 2015.
- 4. Strayer DS, Rubin E. Rubin's Pathology. 7th ed, Wolters Kluwer, Philadelphia, 2015.
- 5. Rubin E, Gorstein F, Rubin R, Schwarting R, Strayer D. Rubin's Pathology, Lippincott Williams Wilkins, Philadelphia, Baltimore, 4th ed, 2004.

Teaching methods:

- Interactive theoretical and practical teaching
- Consultations
- Seminar papers

Required previously passed exams:

None

Grade (max. 100 points)

Pre-exam obligations

- Attendance and activity at lectures: 0 10 points
- Activity at practice classes: 0 20 points
- Seminar papers: 0 10 points
- Tests: 0 30 points

Final exam

■ Written exam: 0 – 30 points