Syllabus
Pathological Physiology 1
Winter Semester 2022/2023
Week 5

General Medicine

A. Lecture

1. **Pathogenesis I**
   - Microcirculatory failure (shock), MODS, DIC (hypercoagulation)

B. Seminars according to schedules on department webpage (patfyz.medic.upjs.sk)

1. **T**: Acid-base disorders
   - Acid-base balance – general principles, classification, compensatory mechanisms
   - Respiratory acidosis and alkalosis
   - Metabolic acidosis and alkalosis
2. **S:** Edemas
3. Practical protocol: Acid-base disorders – case studies
   - Analysis of case studies under the guidance of a teacher
   - Prepare protocols, submit them to the teacher by e-mail or in person at the seminar or upload to group MS Teams - according to the teacher's instructions
   - Theoretical introduction and case studies available at **http://patfyz.medic.upjs.sk/estudmat/AcidBaseDisorders.pdf**
   - Editable protocol form available at **http://patfyz.medic.upjs.sk/estudmat.htm**
4. Examination of knowledge (quiz, oral examination)
5. Presentations of the selected topics according to the group schedules

Dental Medicine

A. Lecture

2. **Pathogenesis I**
   - Microcirculatory failure (shock), MODS, DIC (hypercoagulation)

B. Seminars according to schedules on department webpage (patfyz.medic.upjs.sk)

1. **T**: Acid-base disorders
   - Acid-base balance – general principles, classification, compensatory mechanisms
   - Respiratory acidosis and alkalosis
   - Metabolic acidosis and alkalosis
2. **S:** Edemas, Calcium and phosphate metabolism disorders
3. Examination of knowledge (quiz, oral examination)
4. Presentations of the selected topics according to the group schedules

Seminars (S) = special topics for discussion; **Tutorials & homeworks & exams (T)** = discussions, consultations, oral and quiz exams on the current topics.

Note: The range of topics and their time-table during the tutorials and seminars in each group is determined by the teacher and to a large extent, by the presentations, consultation interests, questions and readiness of the group and may vary in between groups. Neither tutorials nor seminars are lectures, but dialogue and discussion and thus require an active participation and preparation of students for the topics.

Recommended audiovisual materials

Microcirculatory failure

- Shock https://www.youtube.com/watch?v=sJWR93G4UpI
- DIC https://www.youtube.com/watch?v=Gmh01S0msfY

Acid-base disorders

- Blood gases https://www.youtube.com/watch?v=KudrLakBgeU
- Introduction to acid-base disorders https://www.youtube.com/watch?v=jWpKJVop6G8
- Metabolic acidosis https://www.youtube.com/watch?v=IF6oF5H43Ac
- Metabolic alkalosis https://www.youtube.com/watch?v=Wf0ruPTmP1o
- Respiratory acidosis https://www.youtube.com/watch?v=wZICSJZOTH4
- Respiratory alkalosis https://www.youtube.com/watch?v=7aPzaVkCjss
- Renal tubular acidosis https://www.youtube.com/watch?v=knrcXFTBgMk
- Lactic acidosis https://www.youtube.com/watch?v=0RDhocK5kEI