

# **ANESTHESIOLOGY – MEDICINE 5<sup>th</sup> YEAR**

## **SEMINARS:**

The seminars are designed so that the student processes particular subject area, usually in the form of PowerPoint presentations. The teacher (mentor) evaluates student presentation (grades 1-5). Each absence from seminars must be additionally passed (colloquium) at the respective teachers. Without it, the student is not allowed to approach the final exam!!

### **Seminar topics and mentors:**

- S1. Fluid Therapy and Venous Access (central, peripheral) (2 hours) – Doc. S. Glumac**
- S2. Cardiopulmonary Reanimation (2 hours) – Doc. M. Lojpur**
- S3. Local Anesthetics (2 hours) – Doc. I. Agnic**
- S4. Acute Pain. Postoperative Pain (2 hours) – Doc. I. Agnic**
- S5. Chronic pain. Pain Clinics (2 hours) – S. Kraljevic, M.Sc.**
- S6. Non-invasive Monitoring of Vital Parameters (2 hours) – N. Dropulic, Ph.D.**
- S7. Emergencies caused by Environmental Factors (2 hours) - B. Ivancev, Ph.D.**
- S8. Hemodynamics (1 hour) – B. Ivancev, Ph.D. + Vasoactive drugs (1 hour) – S. Dosenovic, Ph.D.**
- S9. Acute Coronary Syndrome (2 hours) – M. Lojpur, Ph.D.**
- S10. Oxygen Therapy (2 hours) – B. Duplancic, Ph.D.**

## **DETAILED SCHEDULE WITH PARTICIPATING STUDENTS (yellow)**

### **S1. Fluid Therapy and Venous Access, (2 hours), November 29<sup>th</sup>**

**Mentor: S.Glumac, sandro.glumac@gmail.com**

a) Intravenous cannulas, catheters + Venous approach, central and peripheral (30 min) (1)

b) Crystalloids and colloids (30 min) 2

Discussion: 30 min

### **S2. Cardiopulmonary reanimation (2 hours) November 30<sup>th</sup>**

**Mentor: M. Lojpur, mihajlo.lojpur@gmail.com**

a) BLS 1 – ventilation, compressions, AED (30 min) 3

b) ALS 1 – Drugs in CPR (15 min) 4

c) ALS 2- bradycardia and tachycardia algorhythms, pacemakers, cardioversion (25 min)

5

Discussion: 20 min

### **S3. Local Anesthetics (2 hours) December 1<sup>st</sup>**

**Mentor: I. Agnić, agnic33@gmail.com,**

a) Overview and classification of LAs (30 min) 6

b) Local and systemic complications of local anesthetics; Treatment of local anesthetic toxicity (30 min) 7

Discussion: 30 min

### **S4. Acute Pain. Postoperative Pain. December 2<sup>nd</sup>**

**Mentor: I. Agnić, agnic33@gmail.com,**

a) Analgesics (opioid and non-opioid analgesics (30 min) 8

b) Postoperative pain (epidural, nerve blocks, ....) (30 min) 9

Discussion: 30 min

### **S5. Chronic pain (2 hours) December 3<sup>rd</sup>**

**Mentor: S. Kraljevic, suzyenkraljevic@ymail.com**

a) Chronic Pain Treatment, Back Pain Treatment (30 min.) 10

b) Neuropathic Pain (30 min.) 11

Discussion: 30 min

### **S6. Non-invasive Monitoring of Vital Parameters (2 hours) December 6<sup>th</sup>**

**Mentor: N. Dropulic, nataса.dropulic@inet.hr**

a) monitoring of cardiac function and circulation (30 min) 12

b) monitoring of ventilation + other monitoring – INVOS, BIS, temperature (30 min) 1

Discussion: 30 min

## **S7. Emergencies caused by Environmental Factors (2 hours) December 7<sup>th</sup>**

**Mentor: B. Ivančev, bozena.ivancev@gmail.com**

a) Drowning, Near-drowning; Hypothermia (30 min) 2

b) Electrical Injuries. Lightning Injuries. Envenomations – snakes (30 min) 3

Discussion: 30 min

## **S8.**

### **A. Hemodynamics. (1 hour) December 8<sup>th</sup>**

**Mentor: B. Ivančev, bozena.ivancev@gmail.com,**

a) Basic physiology – cardiac output, systemic and pulmonary vascular resistance, (15 min) 4

b) Hemodynamic effects of anesthetics, opioids and relaxants (15 min)

Discussion: 15 min 5

### **B. Vasoactive drugs, (1 hour), December 8<sup>th</sup>**

**Mentor: S. Dosenovic, sdosenovic@yahoo.com,**

a) Inotrope drugs (15 min) 6

b) Vasoconstrictors and Vasodilators. (15 min) 7

Discussion: 15 min

## **S9. Acute Coronary Syndrome (2 hours) December 9<sup>th</sup>**

**Mentor: M. Lojpur, mihajlo.lojpur@gmail.com**

a) Ischemic Heart Disease; Definition, epidemiology, pathogenesis (30min) 8

b) ACS – diagnosis, clinical symptoms and signs, treatment (30 min) 9

Discussion 30 min

## **S10. Oxygen therapy (2 hours) December 10<sup>th</sup>**

**Mentor: B. Duplančić, bozidar.duplancic@gmail.com**

a) Oxygen - the storage, transport and handling. Oxygen therapy - masks nasal catheters, Venturi masks (20 min) 10

b) Oxygen toxicity (20 min) 11

c) Oxygen therapy during COVID 19 pandemics (20 min) 12

Discussion: 30 min

**Students' numbers in yellow and green colour**