Tanta University Faculty of Medicine

Anesthesia , SICU & pain Medicine Dep.

Date 8 /6/2021

Exam: MS Degree 2<sup>nd</sup> Part
2<sup>nd</sup> paper

SICU& Pain management No. of Questions: 11 Questions

Times allowed: 3 hours

Marks: 270 marks



(15marks)

(15marks)

Q 1: A 66 y man 60 Kg diabetic with chronic kidney disease had RTA, admitted to SICU after fixation of fracture femur and splenectomy on the 3<sup>rd</sup> postoperative day developed tachypnea RR 30 br/min, SpO<sub>2</sub> 82 % on room air, BP 80/45 mmHg, HR 130 b/min, CVP 6 cm H<sub>2</sub>O urine output 50 ml in the last 2 hours blood glucose 250 mg/dl. ABGs pH 7.15, PaO<sub>2</sub> 60 mmHg on oxygen mask 10 liter, PaCO<sub>2</sub> 50 mmHg, HCO<sub>3</sub> 15 mmol/l. Na 150 mmol/L, K 5 mmol/L, Cl 100 mmol/L, lactate 4 mmol/L. a- Explain patient deterioration, How to manage & When to start mechanical ventilation in this patient? (20M) b - Interpret and explain this ABG? (20 marks) c - Describe dynamic tests to diagnose & manage volume responder? (20marks) d - Outline different types of hypernatremia and their management? (15marks) e - Enumerate criteria of acute kidney injury and its management? (15marks) Q 2: During positive mechanical ventilation, patient's peak airway pressures suddenly increased; demonstrate differential diagnosis and management of this situation? (20 marks) Q 3: Mention forms and causes of cardiac arrest and their management? (20marks) Q 4: Mention sedation holiday procedure, advantages and contraindication? (20marks) **Q 5: Enumerate** content of immunonutrition and their function? (15 marks) Q 6: Describe management of multidrug resistant klebsiella pneumonia and factors decrease antibiotic resistance in ICU? (15marks) Q 7: A 30 y old woman complains of a bilateral headache 4 days after undergoing an L3-4 midline epidural steroid injection. The headache is worse when sitting up. What is the diagnosis and management of this (20marks) Q 8: Presence of red flags in acute low back pain suggests the need for further investigation and possible specialist referral. What are the red flags? (20 marks)

**GOOD LUCK** 

Q10: Demonstrate pain management of flail chest & pulmonary contusion?

Q11: Define the followings: opioid tolerance, opioid rotation, opioid hyperalgesia

Q 9: Give an account on pharmacological management of neuropathic pain &mechanisms of action? (20mark)

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Date: 17/5/2021

Exam: Master

Degree 2nd Part

Paper 1

No. of Questions: 12 questions Times allowed: 3 hours

Potal marks:

180 marks



Q 1: A 37 years pregnant woman with mitral stenosis, mitral valve area 2 cm<sup>2</sup>, scheduled for cesarean section. <u>Discuss</u> preoperative preparation, <u>possible</u> anesthetic options and <u>precautions</u> in this patient? (20marks)

Q2: What are precautions to prevent intrauterine asphyxia during anesthesia?

(15marks)

Q3: Mention differential diagnosis of postoperative hypoxemia?

(15marks)

Q4: Full term 3kg infant scheduled for repair of congenital diaphragmatic hernia. Discuss perioperative problems and their management? (20 marks)

Q5: Demonstrate causes and management of intraoperative bradycardia?

(15marks)

Q6: Plan algorithm for difficult intubation?

(15marks)

Q7: <u>Discuss</u> the intra- & postoperative complication associated with laparoscopic surgery? (15 marks)

Q8: Describe anesthetic consideration for repair of open eye injuries?

(15marks)

Q9: Demonstrate with explanation preoperative preparation of asthmatic patients? (10 marks)

Q10: Describe management of one lung ventilation during thoracic surgery with double lumen tube? (15 marks)

Q11: Demonstrate postoperative complications after thyroidectomy & their management? (15 marks)

Q12: Mention the precautions to prevent sickling during anesthesia in patient with sickle cell disease? (10 marks)

GOOD LUCK.

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Date: 29/5/2021

Exam: Master

Degree 2nd Part

Paper 2

No. of Questions: 9Questions Times allowed: 3 hours Total marks: 180 marks



 $\underline{Q~1:}$  A 50 years man with abdominal trauma underwent surgery for splenectomy and repair of liver tear, admitted to ICU mechanically ventilated because of aspiration during induction of anesthesia  $O_2$  saturation 90% on FiO\_2 100%. arterial blood gas (pH 7.23 , PaCO\_2 32 mmHg , PaO\_2 60 mmHg , HCO\_3 16 mmol/L , Lactate 4 mmol/L , Na 140 mmol/L , K 5 mmol/L , Cl 100 mmol/L )

a. Outline diagnosis & ventilatory strategy in patient with acute respiratory distress syndrome? (20mark)

b. Interpret and explain this ABG?

(10 marks)

c. Mention ECG changes and management of hyperkalemia?

(10 marks)

Q 2: A 65 years female patient weight 60 kg, diabetic, had left lower limb wet gangrene, planned for below knee amputation. Patient is drowsy blood pressure 80/50 mmHg, heart rate 120 b/min, respiratory rate 27 br/min, urine output 50 ml in the last 6 hours. Admitted to ICU for preoperative preparation.

A - Mention causes and management of shock in this patient?

(20marks)

B - Enumerate criteria of acute kidney injury and its management?

(10marks)

C - Explain causes and management of supraventricular tachycardia?

(10marks)

Q3: Enumerate complication of parenteral nutrition?

(10marks)

Q4: Define status epilepticus and Mention phases of management?

(10 marks)

Q5: Mention sectation holiday technique its advantage and its contraindication?

(10marks)

Q6: Mention non pharmacological prevention of ventilator associated pneumonia?

(10marks)

Q7: Define: Chronic pain, Hyperalgesia, Allodynia and Dysesthesia?

(20marks)

Q8: Describe different analysis protocols for 2 years old child after hernia repair with circumcision? (20M

Q9: What are the effects of improper management of acute postoperative pain?

(20 marks)

GOOD LUCK.

Tanta University

Faculty of Medicine

Anesthesia, SICU & Pain Medicine Dep.

Date: 1 / 6 / 2021

Exam: MS Degree 2nd Part Paper 1 Anesthesia

No. of Questions: 13 Short Questions

Times allowed: 3 hours

Marks :270 marks



1 - A 31-year-old primigravida at 36 weeks' gestation presents with blood pressure 170/110 mmHg, proteinuria, persistent headache and hyperreflexia. She requires delivery by caesarean section within three hours. Justify your choice of anesthesia? (20 marks) 2 - Discuss particular problems may occur during lower abdominal surgery in a patient with traumatic transaction of the spinal cord at C6 four weeks previously? (25marks) 3 – Describe management of a patient developed intraoperative air embolism? (20marks) 4 - Female patient aged 46y presented with loss of consciousness. CT showed subarachnoid hemorrhage. Discuss complications after clipping of cerebral aneurysm? (25marks) 5 - Demonstrate potential complication of prone position and how can be avoided? (20marks) 6 - 2 month old infant presented with pyloric stenosis, the patient had 3 days history of projectile vomiting Describe preoperative management of this patient? (20marks) 7 - Plan how to minimize intraoperative transfusion requirement? (20 marks) 8 - Demonstrate precautions to prevent sickling during anesthesia in patient with sickle cell disease? (20marks) 9 - Describe anesthetic consideration in patient with mitral valve prolapse? (20marks) 10 - Describe management of one lung ventilation during thoracic surgery with double lumen tube? 11 - Demonstrate postoperative complications after thyroidectomy & their management? (20M) 12 - Child 2 years old in preanesthesia clinic had large adenoid and rhinorrhea scheduled for adenoidectomy. When to postpone this case? (20 marks) 13 - Mention manifestations and treatment of local anesthetic toxicity? (20 marks)

GOOD LUCK.