

## **South Zone Yuva Fogsai 2020 Quiz - BSOG round**

### **Topic- Critical Care in Obstetrics**

**Date: 23.2.2020                      100 marks**

**Happy Quizzing!!!**

**1. The minimal monitoring required for a critically ill patient during transport includes all except**

- a. Continuous Pulse Oximetry
- b. ECG
- c. Regular assessment of vital signs
- d. **Monitoring of urinary output (Williams 916)**

**2. High dependency unit has to have all of the following facilities except:**

- a. Airway access equipment
- b. Suction Apparatus
- c. Vascular access equipment
- d. **Invasive ventilator support**

**3. Which of the following is not true about Transfusion Related Lung Injury (TRALI)?**

- a. Occurs within 1-6 hours of transfusion
- b. O2 Saturation <90% on room air
- c. Pulmonary edema on Chest X-ray
- d. **Responds to Diuretics treatment**

4. One of the following can cause both Cardiogenic and Non-Cardiogenic Pulmonary Edema:

- a. **Vigorous Intravenous Fluid Therapy (Williams 917)**
- b. Acute Haemorrhage
- c. Hypertensive Cardiomyopathy
- d. Pre-Eclampsia Syndrome

5. Hypoxemia is defined as PaO<sub>2</sub> less than

- a. 90
- b. 80
- c. 70
- d. **60**

6. All of the following except one are AHA Guidelines in dealing with critically ill gravidas:

- a. Relieve possible venacaval compression by left lateral displacement of the uterus
- b. **Administer 90% oxygen (Williams, 931 Administer 100% oxygen)**
- c. Establish Intravenous access above the Diaphragm
- d. Assess for hypotension which requires therapy

7. Which is the specific marker of sepsis?

- a. Pro BNP
- b. **Procalcitonin**
- c. C- Reactive Protein
- d. WBC

**8. Which of the following statements is incorrect regarding asthma in pregnancy?**

- a. Asthma usually does not affect labour or delivery
- b. Asthma is a common condition that affects < 10% of pregnant women
- c. Asthma worsens in pregnancy in 80% of cases (Asthma In pregnancy, Obstet Gynaecol 2013)**
- d. Inhaled corticosteroids are the standard anti-inflammatory therapy for asthma

**9. In cases of hypovolemic shock, oliguria/anuria develops at a volume deficit of**

- a. 15 %
- b. 20 %
- c. 30 %
- d. 40 %**

**10. Which of the following statements is true of pulmonary artery catheter monitoring in acutely ill gravida?**

- a. It has been shown to improve survival
- b. It is essential for the care of patients with severe preeclampsia
- c. Its use in critically ill obstetrical patients is of limited value (Williams)**
- d. It aids in the management of patients with low injury- severity scores

**11. What scoring system is used to categorize the severity of DIC?**

- a. EDEN
- b. ISTH- The International Society of Thrombosis and Haemostasis**
- c. Berlin
- d. Swansea

**12. A pregnant patient with chronic hypertension develops superimposed preeclampsia. She is diagnosed with pulmonary edema on the first postpartum day. Which of the following statements regarding this complication is true?**

- a. The Pulmonary edema may be cardiogenic in origin
- b. The Pulmonary edema may be related to increased capillary permeability
- c. Brain natriuretic peptide levels are less informative in pregnant patients compared with levels in non-pregnant patients
- d. All of the above (Williams)**

**13. Which tocolytic drug has the strongest association with the development of pulmonary edema in obstetrical patients?**

- a. Atosiban
- b. Terbutaline (Williams)**
- c. Indomethacin
- d. Magnesium sulphate

**14. Which of the following clinical signs defines progression from the warm phase of septic shock to cold phase of septic shock?**

- a. Oliguria (RCOG Green Top guideline No: 64a. Bacteria sepsis in pregnancy- Apr 2012)**
- b. Tachypnoea
- c. Leucocytosis
- d. Pulmonary hypertension

**15. Placental abruption is seen more often in all of the following conditions except:**

- a. Chorioamnionitis
- b. Multiple pregnancies
- c. Preeclampsia
- d. Primigravida (Antepartum haemorrhage. Current Obstet Gynaecol. 2006)**

**16. Which of the following features is not a hallmark of acute fatty liver of pregnancy?**

a. Disseminated intravascular coagulation of pregnancy

b. Elevated liver enzymes

c. Hyperuricaemia

**d. Proteinuria (Hyperemesis, gastrointestinal and liver disorders in pregnancy. Obstet Gynaecol Reprod Med. 2013)**

**17. All are classical symptoms of Wernicke's encephalopathy except:**

a. Ataxia

b. Blindness

c. Confusion

**d. Convulsions (Hyperemesis, gastrointestinal and liver disorders in pregnancy. Obstet Gynaecol Reprod Med. 2013)**

**18. Of the following, the most consistent finding in uterine rupture is:**

**a. Abnormal CTG (RCOG Green Top guideline No 45. Birth after previous caesarean birth)**

b. Acute scar tenderness

c. Haematuria

d. Maternal tachycardia

**19. In the recent MBRRACE-UK report (2014), what was the leading overall single cause of maternal death?**

**a. Cardiac disease (Saving lives, Improving mothers care full report 2014)**

b. Haemorrhage

c. Sepsis

d. Suicide

**20. Management of collapse due to intravenous injection of local anaesthetic is:**

- a. Activated charcoal orally
- b. Calcium gluconate 10% IV
- c. Intralipid 20% infusion (GTG 56 Maternal collapse i pregnancy and the puerperium- RCOG)**
- d. Magnesium sulphate 20% IV

**21. Which is the blood marker of choice for diagnosis of acute myocardial infection in pregnancy?**

- a. Creatinine kinase isoenzyme MB
- b. C- reactive protein
- c. LDH
- d. Troponin (Myocardial infarction in pregnancy. The Obstetrician & Gynaecologist 2013)**

**22. Which of the following should not be used in the acute phase of MI in pregnancy?**

- a. Aspirin
- b. Labetalol
- c. LMWH
- d. Nifedipine (Myocardial infarction in pregnancy. The Obstetrician & Gynaecologist 2013)**

**23. Which is the most common scoring system used in sepsis?**

- a. SAPS
- b. APACHE
- c. Quick SOFA**
- d. LODS

**24. Which one of the following is not a risk factor for myocardial infarction in pregnancy?**

- a. Antepartum infections (Myocardial infarction in pregnancy. The Obstetrician & Gynaecologist 2013)**
- b. Blood transfusion
- c. Eclampsia
- d. Migraine headaches

**25. A 32-year-old nulliparous woman attends the emergency department at 34 weeks' gestation with complaints of severe dyspnoea. She is known to suffer from asthma and currently uses salbutamol and beclomethasone inhalers. She also gives a history of cough with green sputum for the previous 4 days. Examination reveals bilateral wheeze and crackles at the left lung base. Pulse rate is 120 bpm, temperature 38.1°C and oxygen saturation on air 91%. What should be the initial management?**

- a. Intravenous antibiotics
- b. Nebulised salbutamol
- c. Nebulised ipratropium bromide
- d. Oxygen (Asthma In pregnancy. Obstet Gynaecol 2013)**

**26. What is the final healing phase of acute respiratory distress syndrome in adults termed?**

- a. Fibrotic (Williams)**
- b. Secretory
- c. Exudative
- d. Fibroproliferative

**27. Which intervention is least likely to be beneficial in the treatment of early sepsis?**

- a. Correction of anaemia
- b. Albumin administration (Williams)**
- c. Broad-spectrum antimicrobials
- d. Aggressive hydration with crystalloid solutions

28. Which of the following mediators of sepsis syndrome can cause myocardial depression?

- a. Bradykinin
- b. CD4 T cells
- c. Interleukin-6 (Williams)
- d. Tumour necrosis factor- $\alpha$

29. Imaging modalities which can be used safely in critically ill pregnant women include all except

- a. Xray chest
- b. MRI head & abdomen
- c. CT abdomen & chest Indian J Anaesth. 2018 Sep; 62(9):
- d. IVP (intravenous pyelography)

30. Maternal mortality rate is defined as number of maternal deaths in a given time per

- a. 100,000 women of reproductive age (DC Dutta's text book of obstetrics- 9th edition)
- b. 100,000 delivered women
- c. 10,000 live births
- d. 100,000 live births

State whether True or False 2 marks each- 20 marks

1. Pulmonary Artery Catheterisation is very helpful in monitoring patients with Severe Preeclampsia. **F (Not useful at all. Rarely done)**
2. In pregnancy, Cardiogenic Pulmonary Edema is more common. **F (Non- cardiogenic edema is more common)**
3. Magnesium Sulphate in Severe Preeclampsia can also cause Pulmonary Edema. **T Williams, 918**
4. Echocardiography in pregnancy is important especially to evaluate Right Ventricular function. **T Williams 917**

5. The normal range of BNP is between 100 to 500pg/cc. **T Williams 918**
6. Acute Pulmonary Edema is by itself an indication for emergency Caesarean section. **F Williams 918**
7. Each gram of Haemoglobin carries 1.2ml of Oxygen when 90% saturated. **T Williams 919**
8. At any given oxygen tension, fetal Hb carries more oxygen than Adult Hb. **T Williams 920**
9. In Septic shock, vasoactive drugs should be given to correct hypotension and perfusion abnormalities before aggressive fluid treatment. **F Should be given only when aggressive fluid therapy fails to correct hypotension and perfusion abnormalities. Williams 925**
10. The life span of sickled RBCs is 10-20 days. **T Critical Care in Obstetrics Belfort 393**

**Decode any 5 Acronyms 2 marks each- 10 marks**

1. EMTALA- **Emergency Medical Treatment And Labour Act**
2. CIRCI- **Critical Illness Related Corticosteroid Insufficiency**
3. PRAMS- **Pregnancy Risk Assessment Monitoring Systems**
4. FAST Scan: **Focused Assessment with Sonography for Trauma scan**
5. PUQE: **Pregnancy Unique Quantification of Emesis and Nausea**
6. qSOFA: **Quick Sequential Organ Failure Assessment (SOFA) Score**
7. TACO: **Transfusion Associated Circulatory Overload**

**Give the correct Formulas for the following: 2 marks each-10 marks**

1. Mean Arterial Pressure (MAP) mmHg:  **$[\text{Systolic BP} + 2 (\text{Diastolic BP})] \div 3$**
2. Cardiac Output (CO) L/min: **Heart Rate x Stroke Volume**
3. Stroke Volume (SV) ml/beat:  **$\text{CO} / \text{HR}$**
4. Cardiac Index (CI) L/min/m<sup>2</sup>:  **$\text{CO} / \text{BSA}$**
5. Shock Index:  **$\text{HR} / \text{SBP}$**

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