قائمة الاسئلة

معدات التخدير - المستوى الثاني - قسم تخدير - كلية الطب والعلوم الصحية - برامج العلوم الطبية التطبيقية - الفترة الثانية - درجة الامتحان (70)

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1) about medical gas supply is false:
   1) - takes the form of either cylinders or a piped gas system
   2) - gases and vapours are stored under pressur
   3) - Cylinders are manufactured in different sizes
   4) + non above
2) choose the correct stetment:
   1) - liquefaction of a gas at room temperature is impossible since the room temperature is above its critical temperature
   2) + Critical temperature is the temperature above which a substance cannot be liquefied no matter how much pressure is applied.
   3) - Lightweight cylinders can be made from molybdenum steel
   4) - all above are correct stetments
3) which stetment is false:
   1) - The top end of the cylinder is called the neck
   2) + There is a plastic disc around the neck of the cylinder is called bodok seal
   3) - cylinder valves are mounted on the neck of the cylinder
   4) - A full oxygen cylinder at atmospheric pressure can deliver 130 times its capacity of oxygen
4) About cylinder test all is ture, except:
   1) - Flattening, bend and impact tests
   2) - Tensile test
   3) + tested by manufacturers at regular intervals, usually 3 years
   4) - Pressure test
5) all are cylinder safety features, except:
   1) - color coded
   2) - pin index safety system
   3) + Fand J are stored horizontally
   4) - overpressurized cylinders are hazardous
6) All about piped medical gas and vacum is true,except:
   1) - gases are delivered from central supply pointto different sites in the hospital
   2) + gases delivered at pressure of about 200Kpa
   3) - The size of the pipes differs according to the demand that they carry
   4) - Outlets can be installed as flush-fitting units, surface-fitting units
7) Concerning cylinders is false:
   1) - Oxygen is stored in cylinders as a gas.
   2) + The pressure in a half-filled oxygen cylinder is 13 700 kPa.
   3) - The pressure in a half-fullnitrous oxide cylinder is 4400kP.
   4) - Pressure in a full Entonox cylinder is 13 700 kPa.
8) About Oxygen is false:
   1) - For medical use, oxygen is usually formed from fractional distillation of air.
   2) + Long-term use can cause bone marrow depression.
   3) - absolute pressure of oxygen is directly proportional to its absolute temperature.
   4) - The critical temperature of oxygen is −118°C.
9) Concerning piped gas supply in the operating theatre is true:
   1) - Compressed air is supplied only under one pressure.

2) + The NIST system is the British Standard
3) - Only oxygen and air are supplied
4) - E-size cylinders are normally used in cylinder manifold

10) Safety features of a modern anaesthetic machine to ensure the delivery of a safe gas mixture should include
1) - Colour-coded pressure gauges.
2) - Colour-coded flowmeters
3) - Alarm for failure of oxygen supply.
4) + all above

11) about Flowmeters in an anaesthetic machine is false:
1) + N2O may be used in an O2 flowmeter without a change in calibration.
2) - Flowmeters use a tube and bobbin
3) - They are an example of a variable orifice device
4) - Both laminar and turbulent flows are encountered

12) about vaporizers is true:
1) - Manual ventilation using a vaporizer in circle (VIC causes a reduction in the inspired concentration of the inhalational agent
2) - A Tec Mark 3 vaporizer can be used as a VIC.
3) + Gas flow emerging from the vaporizing chamber should be fully saturated with the inhalational agent
4) - The bimetallic strip valve in Tec Mark 5 is in the vaporizing chamber.

13) about pressure gauge is true:
1) + Use the Bourdon pressure gauge principle
2) - The pressure reflects accurately the cylinders' contents for both oxygen and nitrous oxide.
3) - Can be interchangeable between oxygen and nitrous oxide
4) - The same pressure gauge can be used for both cylinder andpipeline gas supply

14) all about Flowmeters on an anaestheticmachine is true,except:
1) - They have an accuracy of ±2.5%
2) + They have a tapered tube with a narrow top
3) - At high flows, the density of the gas is important in measuring the flow.
4) - The reading of the flow is from the top of the bobbin

15) about pressure regulator is true,except:
1) - 400 They maintain a gas flow at a constant pressure of about Kpa
2) + Their main purpose is to protect the patient
3) - Relief valves open at 700 kPa in case of failure
4) - Flow restrictors can additionally be used in pipeline supply

16) The non-return valve on the back bar of an anaesthetic machine between the vaporizer and common gas outlet is false:
1) - Decreases the pumping effect
2) - Is designed to protect the patient
3) - Is designed to protect the machine
4) + Opens at a pressure of 70 Kpa

17) The oxygen emergency flush on an anaesthetic machine is true
1) - Operates at 20 L/min.
2) - Is always safe to use during anaesthesia
3) + Increases risk of awareness during anaesthesia
4) - Can be safely used with a minute volume divider ventilator.

18) APL valve in a breathing system is false:
1) - In the open position, a pressure of less than 1 cm H2O (0.1 kPa) is needed to

actuate the valve.

2) - A pressure relief mechanism is activated at a pressure of 60 cm H2O

3) + Is incorporated in the T-piece breathing system.

4) - Should be closed during controlled ventilation using a Bain breathing system and an intermittent blower ventilator

19) Breathing systems is false

1) - The FGF rate required to prevent rebreathing of alveolar gas in the breathing system is a measure of the efficiency of a breathing system.

2) - The reservoir bag limits the pressure build-up in a breathing system to about 40 cm H2O.

3) - The inner tube in the Bain system delivers the FGF.

4) + The Humphrey ADE system can be used for spontaneous ventilation only

20) Concerning soda lime is true

1) - 20% volume for volume of soda lime is sodium hydroxide.

2) - calcium carbonate consists 90 % of it

3) - 11 kg of soda lime can absorb about 120 mL of CO2.

4) + The reaction with carbon dioxide is exothermic

21) about bain system is true:

1) - Is an example of a Mapleson A system

2) - Requires a FGF of 70 mL/kg during spontaneous ventilation.

3) - Is made of standard corrugated tubing.

4) + Can be used for both spontaneous and controlled ventilation

22) T-piece breathing system:

1) - Can be used in paediatric practice only.

2) + Mapleson F system is the E system plus an open-ended reservoir bag

3) - Is an efficient system

4) - With a constant FGF, a too small reservoir has no effect on the performance of the system.

23) 7. Which of the following is true

1) - The Magill classification is used to describe anaesthetic breathing systems

2) - Modern anaesthetic breathing systems are constructed using anti-static materials.

3) + Efficiency of a breathing system is determined by the mode of ventilation of the patient

4) - Circle systems must only be used with very low FGFs.

24) about The circle breathing system is false:

1) - With low flow rates, substance A can be produced when sevoflurane is used.

2) + Patients should not be allowed to breathe spontaneously, because of the high resistance caused by the soda lime.

3) - Failure of the unidirectional valves to close leads to an enormous increase in the dead space.

4) - Exhaustion of the soda lime can be detected by an end-tidal CO2 rebreathing waveform.

25) Regarding the circle system is true:

1) - A high FGF is needed in the first 15 minutes to wash out any CO2 remaining in the breathing system

2) - The pH of soda lime is highly acidic.

3) - The lower the FGF, the slower the exhaustion of soda lime granules

4) + Partially harmful substances can be produced when using soda lime.

26) Concerning tracheal tubes is true:
1) - The RAE tracheal tube is ideal for microlaryngeal surgery
2) + Preformed tracheal tubes have a higher risk of bronchial intubation
3) - RAE tubes stand for reinforced anaesthetic endotracheal tubes
4) - The Oxford tracheal tube has a left-facing bevel.

27) [object]Laryngeal masks is true:[/object:0:0:]
1) - They can prevent aspiration of gastric contents
2) - The bars at the junction of the cuff and the tube prevent foreign bodies from entering the trachea
3) + Because of its large internal diameter, it can be used in spontaneously breathing patients for long periods of time.
4) - It can be autoclaved and used repeatedly for an unlimited number of times

28) Double lumen endobronchial tubes is true
1) + Robertshaw double lumen tubes have carinal hooks
2) - Carlens double lumen tubes have relatively small lumens
3) - CPAP can be applied to the deflated lung to improve oxygenation.
4) - Fibreoptic bronchoscopy can be used to ensure correct positioning of the tube

29) Concerning the tracheal tube cuff during anaesthesia:
1) - Low-pressure/high-volume cuffs prevent aspiration of gastric contents
2) - The intracuff pressure can rise significantly because of the diffusion of the anaesthetic inhalational vapour
3) + High-pressure/low-volume cuffs may cause necrosis of the tracheal mucosa if left in position for long periods
4) - The pressure in the cuff may decrease because of the diffusion of nitrous oxide

30) Concerning tracheal tubes is false
1) - The ID diameter is measured in centimetres
2) - Red rubber tubes never have cuffs
3) - The tip is cut square
4) + all above

31) Concerning the Venturi mask is false
1) - Gas flow produced should be more than 20 L/min
2) - Reducing the flow of oxygen from 12 to 8 L/min results in a reduction in oxygen concentration
3) + There is rebreathing in the mask

32) High-air-flow oxygen enrichment face masks is true
1) - The size of the constriction of the Venturi has no effect on the final O2 concentration delivered to the patient
2) - The holes on the side of the mask are used to entrain ambient air
3) + The gas flow delivered to the patient is more than the peak inspiratory flow rate.
4) - There is significant rebreathing

33) all stetment about Face masks used during anaesthesiaare false, except:
1) + The rubber mask is covered by carbon particles which act as an anti-static measure
2) - Masks have no effect on the apparatus dead space
3) - The mask’s cuff has to be checked and inflated before us
4) - Masks have a 15-mm end to fit the catheter mount

34) Variable performance masks is true:
1) + During slow and deep breathing, a higher FiO2 can be achieved

2) - Ambient air is not entrained into the mask
3) - Alveolar gas rebreathing is not possible
4) - Can be used safely on all patients

35) Concerning fixed performance devices is true
1) + Anaesthetic breathing systems with reservoirs are fixed performance devices
2) - Distal to the constriction of a Venturi, there an increase in potential energy
3) - Gas sampling ports should always be built into the structure
4) - Should never incorporate an angle piece