GENESIS

(Post Graduation Medical Orientation Centre)

Foundation-1 Batch

Total Number- 60 | **Subject: Body Fluid** | **Time: 30 Min**

Pass Mark-42 | Question 16-30 is based on Single answers | **Date: 25/01/20**

1. Metabolic acidosis ē normal anion gap
a) Renal failure
b) Diarrhoea
c) Ureterosigmoidostomy
d) Acetazolamide
e) NH_4Cl ingestion
F(Increased anion gap) TTTT(Ref: vision 9th , Page-335)

2. ECF differs from ICF
a) Main ions –K^+,Mg^{++}
b) More protein content
c) Average P^H-7.1
d) Provide nutrients to cell for maintaining cellular life
e) Provides essential fluid media inside the cell for chemical reaction
F (Na+,cl-, HCO-3)F(less)F(7.4) TF
(Function of ICF) (Ref: Vision 9th page-309)

3. Following statements are true regarding calcium
a) Remain in 3 forms in body
b) Respiratory alkalosis is responsible for increase serum Ca^{2+} level
c) Acidosis leads to decrease Ca^{2+} level
d) Hyperthyroidism leads to hypercalcemia
e) Normall 98% calcium reabsorption occurs in PCT which is PTH dependent
TFFTF (Ref: vision 9th Page-326)

4. Compared with intracellular fluid, the extraceilular fluid has lower
a) Osmolality
b) Sodium ion concentration
c) Chloride ion concentration
d) Potassium ion concentration
e) Hydrogen ion concentration
FFFTT (Rodde-1)

5. A fall in plasma Na^+ concentration
a) Results from excessive production of ADH
b) Decreases intracellular fluid volume
c) Occurs in people engaged in hard physical work in hot humid climates
d) Reduces plasma osmolarity
e) Is likely to cause thirst
TFTTF (Because decrease plasma osmotarity)

6. Inhibition of Na^+-K^+- ATPase would result in increased
a) Intracellular Na- concentration
b) Intracellular K^+ concentration
C) Intracellular glucose concentration
d) Na^+-glucose co-transport
e) Na^+-Ca^{2+} counter-transport
TFFFF

7. ADH acts on the following parts of kidney
a) PCT
b) Thin ALLH
c) DLLOH
d) DCT
e) Collecting duct
F FF T T (ADH acts on later DCT and cortical collecting duct)

8. Regarding total body water-
a) Body fluid declines with age
b) Female has lower percentage of water
c) Is inversely proportional to fat
d) Early fetal life contains 95% of water
e) Male has more water than female
TTTTT

9. Features of Isotonic hypovolemia-
a) Occurs following hypertonic fluid loss
b) There is proportional gain of salt and water
c) Na^+ concentration of lost fluid is equal to that of plasma
d) Plasma Na^+ concususally Increased
e) Both ECF and ICF volume increases
FFTFF

10. Hypervolumia is associated with
a) Increase ANP
b) Decrease Renin
c) Decrease aldosterone
d) Increaase ADH
e) Increase Vagal activity
TTTFT

11. When ECF OP<ICF OP-
a) Cellular dehydration occurs
b) Increase Intracellular Hydrostatic pressure
c) Impairment of cellular metabolic activities
d) Cerebral oedema occurs that lead to coma
e) Water exits from the cell
FTTTF

12.Factors that regulate the transmembrane efflux of potassium -
a) Insulin
b) Potassium excess
c) Alpha blocker
d) Beta agonist
e) Aldosterone
FFFFF

13. Causes of secondary hyperaldosteronism
a) Conn's syndrome
b) Cirrohtic liver disease
c) Malnutrition
d) Nephrotic syndrome
e) CCF
FTTTT

14. Causes of Hypercalcemia with Normal or raised PTH-
a) Primary Hyperparathyroidism
b) Lithium induced Hyperparathyroidism
c) Familial hypocalciuric hypercalcaemia
d) Thyrotoxicosis
e) Milk alkali syndrome
TTTFF

15. Diagnostic features of SIADH are-
a) Low plasma Sodium concentration
b) High plasma osmolality
c) Absense of adenal,thyroid insufficiency
d) Clinically euvolaemic
e) DecreaseUrinary Sodium level
TFTTF

Each question below contains five suggested answers- choose the <u>one best</u> response to each question (16-30)

16. Unchanged Anion gap with hyperchloremic metabolic acidosis occurs in-
a) Lactic acidosis
b) Starvation ketosis
c) Hypercalcaemia
d) Kidney disease
e) Diarrhoea
E (Reg Davidson 23rd ,P-365)

17. Transmembrane potassium Efflux occurs by
a) Acidosis
b) Insulin
c) Aldosterone
d) Alkalosis
e) Acute potassium excess
A

18. Causes of Hypercalcaemia with elevated PTH levels
a) Thyrotoxicosis
b) Thiazide diuretics
c) Glucocorticoid deficiency
d) Breast malignancy
e) Tertiary hyperparathyroidism
E (Ref Davidson 23th,p-662)

19. The commonest cause of SIADH is-
a) Idiopathic
b) Tumours
c) Anticonvulsant
d) TB
e) Psychosis
B (Ref Davidson 23rd ,P-357)

20. ECG changes that occur in Hypercalcaemia causes-
a) Absent p wave
b) Broad QRS comples
c) ST depression
d) Prominant U wave
e) Short QT interval
E

21. Ammonia buffer is present in
a) ICF
b) ECF
c) RBC
d) Urine
e) Blood
D

22. Which one is incorrect regarding laboratory finding of metabolic acidosis-
a) Low PH
b) Low plasma Bicarbonate
c) Low Co2
d) Positive base excess
e) Normal anion gap
D

23. Incorrect regarding Laboratory finding of Metabolic Alkalosis-
a) High PH
b) High Bicarbonate
c) Low PCo2
d) Positive base excess
e) Moderately increased Anion gap
C

24. Which one is not true Feature of Co2 retention-
a) Warm periphery
b) Tachycardia
c) Pulmonary Vasodilatation
d) Flapping tremor
e) Oxy-HB dissociation curve shifts to right
C

25. In false regarding acidosis
a) H+ influx into cell
b) K+ comes to plasma from cell
c) H+ is excreatedin exchange of Na+
d) H+ is excreated in DCT
e) Net effect is Hyperkalaemia
D

26. Paradoxical acidurea occurs in-
a) Metabolic Acidosis
b) Vomiting
c) Respiratory Alkalosis
d) After retention of Co2
e) After diarrohea
B

27. Which one is increased in Vitamin D deficiency-
a) PTH
b) Total S. Calcium
c) Ionised Serum Calcium
d) Serum Phosphate
e) Calcium absorption from Upper GIT
A

28. Which one of the following caused Hyperkalemia
a) Insulin
b) ECF hyperosmolarity
c) Aldosterone
d) Alkalosis
e) Alpha blocker
B

29. Which one is not the cause of Normal Anion gap with hyperchloremic metabolic acidosis-
a) Diarrhoea
b) Proximal RTA
c) NH4Cl
d) Hypoalbuminemia
e) Ureterosigmoidestomy
D

30. Type 2 RTA occurs in
a) Early DCT
b) Late DCT
c) PCT
d) CD
e) LOH
C