

(Physiology)
mid ihsan

✓ **GFR is increased when**

A -Renal blood flow is increased

B -Sym. Ganglion activity is reduced

C-A and B **

✓ **Colloid pressure in the efferent arteriole is:**

A- More than that leaving through the renal vein**

B- Less than that leaving through the renal vein

c- less than that enter through the afferent arterioles

✓ **Wrong statement:**

A-Estrogen increases progesterone receptors and vice versa**

B- FSH is necessary for secondary follicle formation

C- increase estrogen lead to increase thickness of the endometrium

✓ **True about juxtaglomerular apparatus:**

A- Increase renin when renal blood flow is reduced

✓ **In central diabetes insipidus (low ADH) which is the lowest osmotic pressure**

place:

A - proximal CT

B - thick ascending

C -thin ascending

D -distal CT

E -collecting tubule**

✓ **Transport max. For glucose is:**

A- The max amount of glucose that transport through all carriers**

✓ **The plasma volume needed to supply as the rate as excreted is:**

A- clearance**

B- GFR

C- ER

✓ **the most powerful compensatory mechanism in respiratory acidosis is:**

A-Increase reabsorption of hco_3 **

✓ **which hormone keeps plasma K normal?**

A -Insulin **

B -Vasopressin

C -ADH

D -Calcitriol

E-Parathyroid hormone

✓ **Osmotic colloid pressure in blood sample taken from blood stream that is just**

About to enter Efferent arteriole:

A -is less than osmotic colloid pressure of the systemic blood

B -is less than osmotic pressure in the urine **

C -is more than the colloid osmotic pressure in thick loop of henle

✓ **about ADH which statements is incorrect;**

A -taking pure water increase ADH secretion **

B -taking alcohol increase ADH secreting

C- increase osmolarity of the blood will lead to increase ADH secretion

✓ **in metabolic acidosis, the kidney will increase net acid excretion, what is the**

Chronic compensatory mechanism:

A- Increase synthesis and secretion of NH_4^{+} **

✓ **Correct regarding implantation :-**

A- Require Secretory phase **

B- Can occur in any site of uterus

C- Need endometrial signals

✓ **In 2nd half of Cycle:**

A) Increase estrogen

B) Increase cervix secretion **

C) Increase water retention

D) Decrease progesterone

final ihsan

Q1 H^+ is secreted in proximal convoluted tubule in exchange with:

A - K^+

B - HCO_3^{**}

C - H^+

✓ **Most Na reabsorption in:**

A - Proximal convoluted tubule **

C - Distal CT

D - Loop CT

✓ **A substance x , it's concentration in final urine 100 times its concentration in**

Plasma, and it's not reabsorbed nor secreted, which of the following true:

- A - 5% of filtrate reabsorbed
- B - 80%.....
- C - 98%.....
- D - 99% of filtrate reabsorbed **
- E - None of the above because it can't be calculated

✓ **During fall in pressure, how kidney auto regulate to preserve GFR :**

- A - Decrease in afferent resistance **
- B - Decrease in efferent resistance
- C - Increase in afferent resistance

✓ **GFR = 100, t max = 250, glucose concentration = 400 mg/dl, how much**

Glucose is excreted:

- A - 100
- B - 150 **
- C - 200
- D - 250

✓ **Which of the following of maneuvers increase ADH stimulation :**

- A - Infusion of 1 liter hypertonic NaCl **
- B - Infusion of 1 liter isotonic
- C - infusion of deionized water

✓ **Effectiveness of buffer system is influenced by:**

- A - Molar concentration
- B - Ratio of conjugated weak base to weak acid
- C - A and b **
- D - None of the above

✓ **testosterone causes the following:**

- A- Descends testes
- B- Bone growth between the ages 1-5 years
- C- Regression paramesonephric duct
- D- More than one of the above **

✓ **just after ovulation:**

- A- Formation of corpus luteum**
- B- High level of estrogen
- C- High of progesterone

✓ **all of the following are related to free calcium ion regulation except :**

- A- Most of the filtered is reabsorbed in proximal tubules
- B- Synthesis of Parathyroid hormone
- C- Synthesis of vitamin D
- D- Regulated reabsorption at distal convoluted tubule
- E- Acid base regulation **

✓ **which substance its tubular concentration at the end of proximal convoluted**

Tubules is higher than its plasma concentration:

- A - Creatinine **
- B - Amino acid
- C - Potassium
- D - Plasma albumin

✓ **Regarding the oogenesis:**

- A- Second meiotic division completed at ovulation
- B- first meiotic division completed at ovulation**
- C- secondary ovum is complete development at fetus life

✓ **(5 days) after fertilization (incorrect) :**

- A- LH increase**
- B- estrogen increase
- C- progesterone increase
- D- hCG increase

Mid healing

Q1. Suspected menstruation of a lady is 29th February ; her fertility

Period is?

- A- 13-16 February.**
- B- 9-11 February
- C- 17-20 February
- D- 13-15 March

✓ **The majority of Sodium is reabsorbed in?**

- A- Proximal tubules. **
- B- Distal tubules
- C- loop of henle

✓ **All of the following will enhance peritubular reabsorption ,**

Except?

- A- Increased BP. **
- B- High afferent resistance.
- C- High efferent resistance.
- D- High filtration fraction.

✓ **Blood in efferent arterioles will have a colloid oncotic pressure:**

- A- Higher than that leaving the renal vein .**
- B- Less than that leaving through the renal vein
- C- less than that enter through the afferent arterioles

✓ **Detrimental element of ions transport in nephrons is?**

- A- NA-K pump in basolateral membrane .**

✓ **Positive feed-back is seen in?**

- A- before ovulation, between estrogen and LH.

✓ **In respiratory acidosis , all of the following will increase , except:**

- A. Ph
- B. Pco2
- C. HCo3.
- D. Ventilation.

✓ **Increase of which of the following will cause sterility in males and**

Infertility and decrease ovulation in females:

- A. Cortisone .**
- B. FSH.
- C. LH.

✓ **Membrane of glomeruli :**

- A- Highly selective.
- B- Contain blood fluid without albumin. **
- C- NOT permeable for glucose
- D- permeable for albumin

✓ **Mechanism of Na+\H+ buffering contains all , except :**

- A- Get H+ into the plasma and Na+ out to the lumen. **

✓ **Diabetic patient calculate amount of glucose in urine , plasma**

Glucose 480, GFR 100 ... Maximum reabsorption is

A-320 'not sure '.

Final healing

✓ **Which of the following increases after menopause?**

- A. LH. **
- B. Estrogen .
- C. AMH .
- D. Endometrial thickening .
- E. Follicles stock.

✓ **Which of the following doesn't appear in thick limb?**

- A. Reabsorption of K+.
- B. Reabsorption of Na+.
- C. Water reabsorption. **

✓ **Which of the following pass in opposite direction to others in distal**

Tubules?

- A. Urea. **
- B. Water.
- C- Na+
- D- Ca++

✓ **About HCG?**

- A. Secreted by inner layer.
- B. Remains high to the next cycle
- C. Decreases after 10 weeks after termination of pregnancy.

✓ **. Five-days after ovulation, which of the following is incorrect?**

- A. Progesterone is high and rising.
- B. Endometrium in secretory phase.
- C. Well-developed oocyte. **
- D. Very low LH.

✓ **Functions of testosterone?**

- A. Spermatogenesis. **
- B. Descent of testis after puberty.
- C. Bone growth in the first 10 years.
- D. More than one of the above.

✓ **With hypokalemia, there is?**

- A. Alkalosis. **
- B. Low aldosterone.
- C. Destruction of pancreatic cells.

✓ **Puberty is?**

- A. Rapid growth. **
- B. Transformation from ability to inability to reproduce.

✓ **Related to HCG with pregnancy?**

- A. Secreted from internal cells.
- B. Disappear after 3 weeks from the end of pregnancy.
- C. Help in maintaining the function of the follicle.
- D. Can be measured before the next expected cycle. **

✓ **Correct about glomerular hydrostatic pressure?**

- A. Increases while the efferent arteriole resistance increases. **
- B. Increases while afferent arteriole resistance increases.
- C. It is the determinant of tubular reabsorption increases.

✓ . **Which of the following is responsible for multiple current System?**

- A. Active transport of NaCl to medullary interstitial.
- B. Passive diffusion of urea to medullary interstitial.
- C. Minimal water reabsorption.
- D. All of the above. **

✓ **Which of the following results in dilute urine?**

- A. Drink of hyperosmolarity fluid.
- B. Destruction of supraoptic nucleoli.
- C. Destruction of hypothalamic stalk just above sella turcica .**
- D. More water reabsorption.

FINAL PULS

1) ADH hormone increases the reabsorption in:

- A- the second part of distal convoluted tubule**
- B- the FIRST part of distal convoluted tubule
- C- the proximal convoluted tubule

✓ **incorrect :**

- A- ADH secretion increases when we take clear water**
- B- increase angiotensin II will lead to increase filtration
- C- increase symp activity will lead to decrease filtration rate

✓ **all of the following occur in hypokalemia except :**

- A-Alkalosis
- B-cardiac toxicity**

✓ **all of the following are transported with Na⁺ in the proximal**

Tubule except:

- A-urea**
- B- Water
- C- glucose
- D- a.a

✓ **What happens in chronic acidosis?**

i think increase in ammonia

✓ **Correct regarding implantation :-**

- A- Require Secretory phase **
- B- Can occur in any site of uterus
- C- Need endometrial signals

✓ **A 55 year old women removed the pituitary gland , what will happen ?**

No oogenesis i think

✓ **Which of the following increases the GFR?**

- A- increase in efferent arteriole resistance**
- B- decrease in efferent arteriole resistance
- C- increase in afferent arteriole resistance

✓ **Which of the following is correct?**

- A- Clearance is used to know the filtrating ability of the kidney
- B- in diabetes mellitus the glucose clearance is more than normal**
- C- patient with hyperkalemia will have metabolic alkalosis
- D- in hyperosmolar urine , there is decrease in ADH level

✓ **HCG is needed for:**

- a) Needed for decent of the testes
- b) Maintain corpus luteum**
- c) More than one of the above

✓ **which of the following hormones go in a opposite direction**

After menopause?

- A- FSH **
- B- estrogen
- C- progestrone
- D- AMH

✓ **Fertility window :**

2 days before LH surge and 2 days after**

Q.one of the following happens when the sperm fertilize the oocyte

ANSWER: loss of membrane permeability

a question about estrogen pathways

a question about the definition of excretion