

REPRODUCTIVE SYSTEM 1ST WEEK



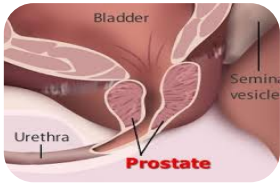
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Anatomy

{1}Development of male genital system

During which of the these weeks gonadal development occurs?

- A. 5th week
- B. 6th week
- C. 7th week
- D. 4th week

Ans : a

By which of these weeks mesenchyme surrounding semineferous cords gives rise to interstitial cells(Leydig's cells)?

- A. 5th week
- B. 6th week
- C. 7th week
- D. 8th week

Ans:D

During DEVELOPMENT OF MALE EXTERNAL GENITALIA The phallus forms which of the following ?

- A. Penis
- B. Scrotum
- C. Spongy urethra
- D. Testis

Ans:a

INTERNAL DESCENT OF TESTIS caused by ?

- A. elongation of cranial part of abdomen
- B. increased intra-abdominal pressure
- C. Enlargement of testes

Ans :A

Which one of the following structure is a derivative of male spongy urethra?

- A. Seminal gland
- B. Prostate gland
- C. **Bulbourethral gland**
- D. Vas deferens
- E. Ejaculatory duct

Ans:c

Which one of the following cells are responsible for masculine differentiation of external genitalia?

- A. Sertoli cells
- B. Leydig's cells
- C. Mesothelial cells
- D. Primordial germ cells

Ans:b

Which of the following is the characteristic feature of the testicular development?

- A. Rete testis .
- B. Seminiferous cords .
- C. Tunica albuginea .
- D. Testis-determining factor (TDF).

Ans:c

Which of these structures gives rise the seminal gland?

- A. Genital tubercle .
- B. Mesonephric duct .
- C. Paramesonephric duct .
- D. Urogenital sinus .

Ans: b

Which one of the following contributes in accumulation of fluid in scrotum?

- A. Cryptorchidism .
- B. Congenital inguinal hernia .
- C. Hydrocele of spermatic cord .
- D. Hydrocele of testis.

Ans:d

6- The common site of the Cryptorchidism is?

- A. Superficial inguinal ring.
- B. Deep inguinal ring.
- C. . Peritoneal cavity.
- D. Pelvis.

Ans:b

Which structure when fuse form the scrotum ?

- A. The phallus .
- B. Mesonephricduct .
- C. labioscrotal folds .
- D. Urogenital folds .

Ans:c

Which one of the following causes of Cryptorchidism ?

- A. increased of androgens .
- B. increased intra-abdominal pressure .
- C. deficiency of androgens .
- D. processus vaginalis does not obliterate .

Ans:c

{2} MALE REPRODUCTIVE SYSTEM

Q1) Where is the exact site of spermatogenesis ?

- A)Epididymis
- b)Vas Deferens
- c)Bulbourethral
- d)Seminiferous Tubules

ans:D

Q2) Where does testicular lymphatic end ?

- a) Lumbar nodes
- b) Para aortic lymph nodes
- c) Superficial inguinal nodes
- d)a-b

ans:D it's the same, because Para aortic lymph nodes lie in front of lumbar vertebral

NOTE:Scrotum, Penis and Prepuce END IN Superficial inguinal nodes

Q3) The epididymis located at..... & ?

- a)superior& anterior to testis
- b)superior& posterior to testis
- c)posterior& inferior to the urinary bladder
- d)lateral to the ampulla of vas deferens

ans:B

note:"C"&"D" are true answer for Seminal Vesicles

Q4)Which of the following choices concerning prostate are correct?

- a)anterior to prostate is Symphysis pubis
- b)Posterior to prostate is rectum
- c)Lateral to prostate is lateral margins of levator ani muscles
- d) Inferior to prostate is Urogenital diaphragm
- E)Superior to prostate apex of the bladder

Ans: A,B&D

Q5)All of the following statements concerning prostate are true except ?

- a)Arterial Supply is inferior vesical artery
- b)Prostatic venous plexus drains into the internal iliac veins
- c)Prostatic venous plexus continuous posteriorly to the vesical venous plexus
- d)Prostatic venous plexus continuous posteriorly to the internal vertebral venous plexus
- e)Lymph drainage internal iliac lymph nodes

ans:C

Q6) Cremaster muscle & fascia originated from ?

- a) from internal oblique muscle
- b) from external oblique muscle .
- c) fasciatransversalis

ans:A

Note: "B" is the origin of External spermatic fascia & "c" is the origin of Internal spermatic fascia

Q7) which one of the following is not included in the spermatic cord ?

- a) femoral branch of genitofemoral nerve.
- b) Vestige of processus vaginalis
- d) Artery of the vas
- c) Vas deferens

ans:A



Genetics

1) Which one of the following is not a feature of Turner Syndrome?

- A. Sterile
- B. Short stature
- C. Broad chest
- D. abnormal life span

Ans: D

In sex chromosome abnormality (Turner, Klinefelter's) there'll be Normal life span & No mental retardation.

2) Which one of the following syndromes is Monosomy?

- A. Down syndrome
- B. Turner's Syndrome
- C. Klinefelter's Syndrome

Ans: B

3) Most cases of Down syndrome arise from ?

- A. non disjunction in the first meiotic division
- B. disjunction in the first meiotic division
- C. non disjunction in the second meiotic division
- D. non disjunction in the first mitotic division

Ans: A

4) The patient comes to you with Webbed neck, not mature sexually, Sterile, Short stature, Broad chest, Normal intelligence, which one of these syndromes does he have?

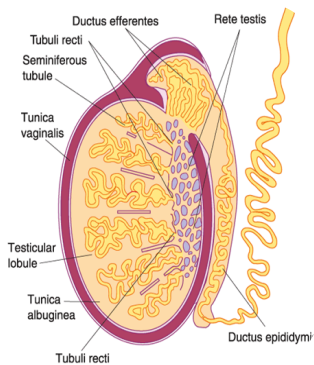
- A. Down syndrome
- B. Turner's Syndrome
- C. Klinefelter's Syndrome

Ans: B

5) Patient has breast enlargement and is sterile, which one of these syndromes does he have and what is the treatment?

- A. Down syndrome, health care
- B. Turner's Syndrome, growth hormone
- C. Klinefelter's Syndrome, testosterone

Ans:c



Histology



Q1) The septa of the testis is formed by?

- a) Dense irregular collagenous C.T
- b) Loose vascular C.T
- c) reticular connective tissue
- d)a-c

ans: A

q2) All of the following choices are true concerning Leydig cell except ?

- a) columnar or pyramidal cells
- b) Cytoplasm acidophilic & vacuolated
- c) Function is Secrete testosterone
- d) Rounded or polygonal cells

ans:A

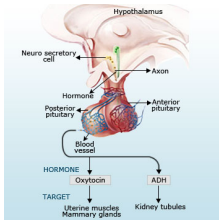
q3) which one of the following is the function of the Sertoli Cell ?

- a) protects the developing spermatogenic
- b) prevents autoimmune infertility
- c) Phagocytosis of cytoplasmic remnants of spermatogenesis

d)a-b

ans:c

note:"d" related to the Blood-Testis Barrier



Physiology



[1] Hypothalamic and pituitary gonadal axis

- 1- Testosterone has direct inhibitory effect on the ?
- A. Hypothalamus
 - B. Anterior pituitary
 - C. Posterior pituitary

Ans: A

- 2-in female GnRH is secreted in pulses every 1 to 2 lasting ?
- A. -5 to 25 minutes
 - B. -30 to 50 minutes
 - C. -60 minutes

Ans: A

- 3-small amount of estrogen with progesterone will ?
- A. -stimulate LH and FSH
 - B. -inhibit LH and FSH
 - C. -inhibit LH and FSH

Ans: C

- 4- leydig cells are mature in ?
- A. Infants testes few weeks after birth

- B. Childhood
- C. all male life

Ans: A

[2] Physiology of androgens and control of male sexual functions

1-the sperm become motile & capable of fertilizing the ovum?

- A. -in the seminiferous tubules
- B. in the epididymis
- C. After ejaculation

Ans: C

2- urethral glands & bulbourethral glands secrete mucous in response to?

- A. sympathetic stimulation
- B. parasympathetic stimulation
- C. autonomic stimulation

Ans: B

3- During fetal life the testis are stimulated to produce testosterone by?

- A. anterior pituitary gonadotropic hormones
- B. -placenta chorionic gonadotropin
- C. -both placenta and anterior pituitary gonadotropic hormones

Ans : B



Pharmacology

[1] Erectile dysfunction

1. Anti-psychotic drugs can ADVERSLY CAUSE erectile dysfunction by which one of the following mechanism?
 - A. decrease sedation
 - B. It has GABA effect
 - C. DA antagonist
 - D. negative vasodilating β_2

Ans: C

2. Which one of the following causes irreversible erectile dysfunction?
 - A. Finasteride
 - B. Anti-epileptic drugs
 - C. Thiazide diuretics
 - D. Cimetidine

Ans: A

3. Sildenafil is an oral treatment of erectile dysfunction which act by inhibit PDE5, which will lead to ?
 - A. prevent breakdown of Guanylatecyclase
 - B. prevent breakdown of cAMP
 - C. prevent breakdown of cGMP
 - D. prevent breakdown of adenylecyclase

ans : C

4. patient came to your clinic complaining of Myalgia & Back pain and after taking the history you knew that he had erectile dysfunction and he's on a medication that causes his symptom. What would be the drug that he's using?
 - A. Vardenafil
 - B. Tadalafil

- C. Avanafil
- D. Sildenafil

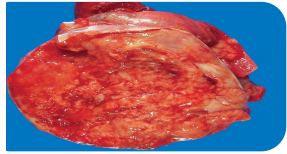
Ans : B

5. After knowing the patient is having problem in the desire which of the following we should prescribe to promote the desire ?
- A. Apomorphine
 - B. Papaverine
 - C. Testosterone
 - D. Vardenafil

Ans: C

6. After using Alprostadil the patient suffers from priapism which one of the following drugs indicated:
- A. Papaverine
 - B. Phenylephrine
 - C. Sildenafil
 - D. Apomorphine

Ans: B



Pathology

[1] Testicular Pathology

1. Male patient has Caseating Granulomatous inflammation in his reproductive system. This type of infection effect which of the following mostly?

- A. Testis
- B. Prostate
- C. Epididymis
- D. Vas deferense

Ans: C

Tuberculosis it almost invariably begins in the epididymis and may spread to the testis.

2. A 60-year-old man with a history of nodular prostatic hyperplasia and recurrent cystitis presents with pain in the scrotum. His temperature is 38°C (101°F). Physical examination reveals a small, tender nodule attached to the testis. Which of the following is the most likely diagnosis?

- (A) Epididymitis
- (B) Orchitis
- (C) Spermatocele
- (D) Urethritis
- (E) Varicocele

The answer is A: Epididymitis.

Epididymitis is an inflammation of the epididymis, usually caused by bacteria, which may be acute or chronic. Bacterial epididymitis in young men most often occurs in an acute form as a

complication of gonorrhea or as a sexually acquired infection with *Chlamydia*. It is characterized by suppurative inflammation.

In older men, *E. coli* from associated urinary tract infections is the most common causative agent. Patients present with intrascrotal pain and tenderness, with or without associated fever. Varicocele (choice E) is incorrect because it does not typically present with pain and fever. Neither orchitis (choice B) nor urethritis (choice D) would present with a nodular scrotal mass.

Diagnosis: Epididymitis

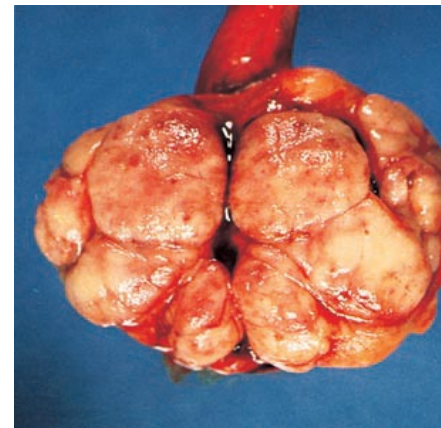
3. A 32-year-old man presents with a testicular mass that he first noticed 2 weeks ago. The mass cannot be transilluminated and appears solid and homogeneous on ultrasound examination. No tumor markers are detected on serologic testing. An orchiectomy is performed, and the surgical specimen is shown in the image. Which of the following is the most likely diagnosis?

- (A) Choriocarcinoma
- (B) Embryonal carcinoma
- (C) Lymphoma
- (D) Seminoma
- (E) Yolk sac carcinoma

The answer is D: Seminoma.

Malignant germ cells that retain the phenotypic features of spermatogonia give rise to seminomas, the most common testicular cancer. The peak incidence occurs in men in their thirties. On gross examination, seminomas appear as solid, rubbery firm masses (see photograph). Seminomas are exquisitely sensitive to radiation and the cure rate is over 90%. The other choices are much less common than seminoma. Moreover, choriocarcinoma (choice A) and yolk sac carcinoma (choice E) release tumor markers that can be identified in blood.

Diagnosis: Seminoma



4. Cryptorchidism increase the risk of which of the following ?

- (A) Leydig cell tumor
- (B) Malignant lymphoma
- (C) Renal cell carcinoma
- (D) Seminoma
- (E) Urothelial cell carcinoma of the bladder

The answer is D: Seminoma.

The clinical significance of undescended testes is not related to the abnormal position of the gonad (patients are asymptomatic) but to an increased incidence of infertility and germ cell neoplasia. The other choices are not complications of cryptorchidism.

5. An orchiectomy is performed in the patient with Choriocarcinoma. Which of the following serum markers would be most useful for monitoring tumor recurrence of this neoplasm following surgery?

- (A) CA-125
- (B) Carcinoembryonic antigen
- (C) α -Fetoprotein
- (D) Human chorionic gonadotropin
- (E) Placental alkaline phosphatase

The answer is D: Human chorionic gonadotropin (hCG). Syncytiotrophoblast cells in choriocarcinomas release hCG, a hormone of pregnancy that is not ordinarily found in males. This marker is useful in the postoperative follow-up of patients who have been treated for nonseminomatous germ cell tumors (NSGCTs).

Fetoprotein (choice C) is secreted by yolk sac tumors (a common component of NSGCTs). Placental alkaline phosphatase (choice E) is a membrane-associated histochemical marker for seminoma and testicular carcinoma in situ (i.e., intratubular germ cell neoplasia).

Diagnosis: Choriocarcinoma

[2] Prostate Pathology

1. Which one of the following is the most common site of benign prostatic hyperplasia?

- A. Central zone
- B. Transitional zone
- C. Peripheral zone

Ans: B

2. Which one of the following is wrong concerning the prostatic adenocarcinoma?

- A. It is palpable in rectal exam
- B. Prostatic hyperplasia predispose to it
- C. It commonly arises in the peripheral zone
- D. In the histopathology there will be branching and papillary infolding
- E. We use Gleason grading system to grade it

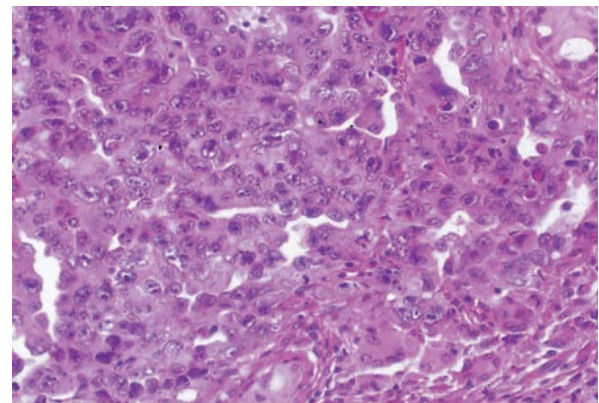
Ans: B prostatic hyperplasia is not a premalignant lesion

3. A 25-year-old man presents with a 4-week history of a painless mass in the scrotum. Physical examination reveals a testicular mass that cannot be transilluminated. Serum levels of AFP and hCG are normal. A hemiorchiectomy is performed. On gross examination, the testicular tumor shows foci of **hemorrhage and necrosis**. Microscopic examination of the tumor is shown in the image. The patient was cured by orchiectomy followed by chemotherapy. Which of the following is the most likely diagnosis?

The answer is B: Embryonal carcinoma.

Embryonal carcinoma invades the testis, epididymis, and blood vessels and metastasizes to abdominal lymph nodes, lungs, and other organs. These malignant cells are highly sensitive to chemotherapy, and the cure rates are now over 90%. The pathologic findings in this case show undifferentiated neoplastic cells, forming sheets and chords, surrounded by dilated vascular channels filled with red blood cells. Choriocarcinoma (choice A) secretes hCG. Lymphoma (choice C) is more common in older men and does not have the morphology shown. Mature teratoma (choice D) features heterologous elements. Yolk sac carcinoma (choice E) secretes AFP.

Diagnosis: Embryonal carcinoma



4. A 55-year-old man presents with urinary symptoms of urgency and frequency. Rectal examination reveals an enlarged prostate. Laboratory studies show an elevated serum PSA level of 4.9 ng/mL. The patient subsequently undergoes a prostate needle biopsy series, which demonstrates two cancer-positive needle cores: Gleason grades 2+2(4) and 3+2(5). Which of the following is the appropriate diagnosis?

- (A) Adenocarcinoma
- (B) Nodular prostatic hyperplasia
- (C) Prostate intraepithelial neoplasia
- (D) Squamous cell carcinoma
- (E) Urothelial cell carcinoma

The answer is A: Adenocarcinoma.

Prostatic adenocarcinomas, which account for 98% of all prostatic tumors, are commonly multicentric and located in the peripheral zones. The aggressiveness of prostatic carcinoma correlates with the Gleason grade. Squamous (choice D) and urothelial cell carcinomas (choice E) involving the prostate are rare.

Diagnosis: Prostate adenocarcinoma

5. A 70-year-old man presents with pain in his back. Relevant clinical findings include a rock-hard, enlarged prostate palpated on rectal examination. Radiologic studies show multicentric, **osteoblastic lesions of the lumbar vertebral bodies**. The patient is treated with leuprolide acetate (lupron), an inhibitor of gonadotropin release by the pituitary. Which of the following statements best summarizes the rationale for this treatment?

- (A) Leydig cells release tumor chemotactic factors.
- (B) Prostate carcinomas frequently metastasize to the gonads.
- (C) Sertoli cells release tumor chemotactic factors.
- (D) The tumor is well known to invade the testes.
- (E) Tumor cells exhibit androgen-dependent growth.

The answer is E: Tumor cells exhibit androgen-dependent growth.

The androgenic control of normal prostatic growth and the responsiveness of prostate cancer to castration and exogenous estrogens support a role for male hormones. Chemical castration by the administration of androgenic antagonists (e.g., leuprolide) is used in the treatment of prostate cancer. Chemotactic factors (choices A and C) are not involved in bone metastases of prostatic cancer, and invasion of the gonads (choices B and D) has no influence on the growth of these metastases.

Diagnosis: Prostate adenocarcinoma

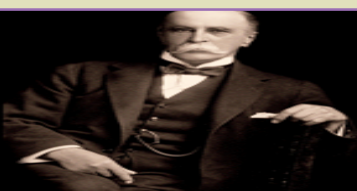
have any questions you want to add, please send it to

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Good luck

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"The good physician treats the disease; the great physician treats the patient who has the disease."

~William Osler