

TEST BANK



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Reviewed by:

Question 1

A 33-year-old woman taking oral contraceptives for a year has noted vaginal bleeding that is not severe, but it occurs nearly every day over the past 5 weeks. On pelvic examination, there is a 0.7 cm polypoid mass noted to extend outward from the endocervical region. The ectocervix appears normal. The uterus is normal in size. The adnexa have no palpable masses. A biopsy of this lesion is performed. Which of the following microscopic findings is most likely to be found in this lesion?

- A Endocervical adenocarcinoma
- B Clear cell adenocarcinoma
- C Microglandular hyperplasia
- D Sarcoma botryoides
- E Endocervical polyp
- F Follicular cervicitis

Answer: C

Question 2

A 48-year-old woman has noted a small amount of irregular vaginal bleeding for the past 2 months. She has a pelvic examination that reveals no cervical lesions, and a Pap smear that shows no abnormal cells. Next, an endometrial biopsy is performed, and there is microscopic evidence for endometrial hyperplasia. An abdominal ultrasound reveals a solid right ovarian mass. Which of the following neoplasms is this woman is most likely to have?

- A Mature cystic teratoma
- B Choriocarcinoma
- C Sertoli-Leydig cell tumor
- D Fibrothecoma
- E Krukenberg tumor
- F Cystadenocarcinoma

Answer: D

Question 4

A 36-year-old woman has had episodes of lower abdominal and pelvic pain for the past 10 years. A bimanual pelvic examination reveals no abnormalities. A Pap smear is negative. She has an abdominal ultrasound scan that reveals no abnormalities. She undergoes laparoscopy, and several 0.2 to 0.5 cm brown nodular lesions are seen on serosal surfaces of the uterus, fallopian tubes, and appendix. These lesions are excised. Which of the following microscopic findings is most likely to be present in these lesions?

- A Endometrial stroma
- B Mesothelial cells
- C Metastatic adenocarcinoma
- D Capillary proliferation
- E Granulomatous inflammation

Answer:A

Question 5

A 47-year-old woman has noted a pressure sensation, but no pain, in her pelvic region for the past 5 months. On physical examination there is a right adnexal mass. An ultrasound scan shows a 10 cm fluid-filled cystic mass in the right ovary, along with ascitic fluid. A fine needle aspirate of the mass is performed and cytologic examination of clear fluid aspirated from the mass reveals clusters of malignant epithelial cells surrounding psammoma bodies. Which of the following neoplasms is she most likely to have?

- A Endometrioid carcinoma
- B Serous cystadenocarcinoma
- C Malignant mesothelioma
- D Mature cystic teratoma
- E Squamous cell carcinoma

Answer:B

Question 6

A representative of the law firm of Flotsam, Flotsam & Jetsam enters your office and serves you with a subpoena that requires you to appear in regard to litigation by one of your former patients, a 31-year-old woman who is claiming that your malpractice led to medical expenses, pain, and suffering because she developed invasive cervical carcinoma. She was last seen in your office 10 years ago. She had been your patient for 5 years, receiving Pap smears in 4 of those 5 years. Your records indicate that she had no abnormal Pap smears. After discussion with your malpractice carrier's attorney, which of the following conclusions is most appropriate?

- A The patient should have continued to return for yearly Pap smears
- B You are at fault in this case and should avoid a trial
- C The laboratory to which the Pap smears were sent is at fault for missing abnormal cells
- D Nothing anyone could have done would have prevented this carcinoma
- E The patient's health insurer is at fault for not covering the full cost of Pap smear testing

Answer:A

Question 8

A 30-year-old infertile woman has had episodic lower abdominal and pelvic pain for 2 years. A physical examination, including pelvic exam, reveals no abnormalities. A Pap smear shows only a few trichomonads and no dysplastic cells. A laparoscopy is performed, and the gynecologist notes the presence of several blue to red 0.2 to 0.4 cm slighted raised lesions scattered on the pelvic peritoneum in the cul-de-sac and broad ligaments. Which of the following is the most likely diagnosis?

- A Metastatic adenocarcinoma
- B *Neisseria gonorrhoeae* infection
- C Endometriosis
- D Candidiasis
- E Leiomyomata

Answer:C

Question 9

A 43-year-old woman has noted menstrual periods that have been exceptionally heavy, lasting 6 to 8 days, for 4 months. She has also noted minor intermenstrual bleeding. On physical examination her uterine cervix appears normal, and a Pap smear shows no abnormal cells. Pelvic examination reveals that the uterus is enlarged to twice normal size and is nodular. There are no adnexal masses. Which of the following is the most likely diagnosis?

- A Endometrial carcinoma
- B Leiomyomata
- C Ectopic pregnancy
- D Endometriosis
- E Secondary syphilis

Answer:B

Question 10

A 43-year-old woman has noted increasing abdominal discomfort for the past year. On physical examination, there is no tenderness. Bowel sounds are present. She has no vaginal bleeding. An abdominal ultrasound reveals a 7 cm left adnexal mass. A total abdominal hysterectomy is performed. Pathologic examination of the ovarian mass reveals it is unilocular, filled with watery fluid, and lined with papillary excrescences. On microscopic examination there is no infiltration of the underlying stroma. Which of the following neoplasms is this woman most likely to have?

- A Granulosa-theca cell tumors
- B Mature cystic teratomas
- C Fibrosarcoma with metastases
- D Borderline serous tumor
- E Clear cell carcinomas

Answer:C

Question 11

A 28-year-old sexually active woman undergoes a routine examination. Pelvic examination reveals no abnormalities. A Pap smear is obtained. The cytopathology report indicates the presence of severely dysplastic cells (high grade squamous intraepithelial lesion, or HSIL). A biopsy of the cervix is performed, and on microscopic examination shows cervical intraepithelial neoplasia III (CIN III). Infection with which of the following organisms is most likely to cause her disease?

- A Herpes simplex virus infection
- B Epstein-Barr virus
- C *Candida albicans*
- D Human papillomavirus
- E *Trichomonas vaginalis*
- F *Gardnerella vaginalis*

Answer:D

Question 13

A 22-year-old woman passes grape-like masses of tissue per vagina in the 16th week of her first pregnancy. She had not felt any fetal movement at any time. On physical examination she measures 18 weeks in size. A D&C is performed, yielding 1000 cc of 0.5 to 1.5 cm fluid-filled vesicles. Microscopic examination of this tissue shows large avascular villi along with trophoblastic proliferation. Which of the following is the best method to employ for her follow-up care?

- A Chest radiograph
- B Serum beta-HCG
- C Endometrial biopsy
- D Pelvic ultrasound
- E Pap smear

Answer:B

Question 14

A 23-year-old woman has the sudden onset of lower abdominal pain. Pelvic examination reveals a normal sized uterus and normal appearing cervix and vagina. However, there is marked tenderness upon palpation of the left adnexal region. A transvaginal ultrasound shows no intrauterine gestational sac, but there is a 2 cm left adnexal mass. Culdocentesis yields bloody fluid. Which of the following is most useful procedure to aid in diagnosis?

- A Serum complement determination
- B Microscopic urinalysis
- C Pap smear
- D Serum beta-HCG
- E Endometrial biopsy
- F WBC count

Answer:D

Question 17

A 64-year-old woman has had itching with irritation of the vulvar region, along with vaginal dryness, for the past 8 months. On physical examination she has pale grey patches from 1 to 2 cm in size on the vulva. Biopsy of one lesion is performed and on microscopic examination shows epithelial thinning, dermal fibrosis, and perivascular chronic inflammation. Which of the following is the most likely diagnosis?

- A Squamous cell carcinoma
- B Lichen sclerosus
- C Condyloma acuminatum
- D Adenosis
- E Extramammary Paget disease
- F Dermatophyte infection

Answer:B

Question 18

For the past year, a 50-year-old woman has noted that her menstrual periods have been exceptionally heavy and last 7 to 9 days. She has noted occasional minor intermenstrual bleeding. For the past 3 months, she has been taking supplemental dietary iron for iron deficiency anemia. On pelvic examination, the uterine cervix appears normal, but the uterus is enlarged to twice normal size. Transvaginal ultrasound reveals the presence of a 9 cm solid mass in the uterus. A hysterectomy is performed, and on gross inspection with sectioning the uterus a reddish-tan mass is found with a fleshy cut surface. Microscopically the mass is highly cellular, with spindle cells having hyperchromatic nuclei and 10 to 20 mitoses per high power field. Which of the following is the most likely diagnosis?

- A Endometrial polyp
- B Adenomyosis
- C Embryonal rhabdomyosarcoma
- D Atypical hyperplasia
- E Leiomyosarcoma
- F Malignant mixed mullerian tumor

Answer:E

Question 19

A 31-year-old G3 P2 woman is at 14 weeks gestation, but has noted a small amount of vaginal bleeding for the past 2 weeks. Laboratory studies show an HCG level of 650,000 U/L. An ultrasound shows a 'snowstorm' for intrauterine contents but no identifiable fetus. A D&C is performed with evacuation of 500 mL of grape-like vesicles. A month later her vaginal bleeding persists and her serum beta-HCG is 35,000 U/L. Which of the following pathologic abnormalities is most likely to be present in this woman?

- A Pulmonary metastases
- B Tubal ectopic pregnancy
- C Endometritis
- D Placental site trophoblastic tumor
- E Invasive mole

answer:E

Question 20

A 33-year-old woman and her husband have wanted a child, but she has been unable to conceive for the past 10 years. She has mild pelvic pain, but regular menstrual cycles. On physical examination the cervix and vagina appear normal. The uterus and adnexal regions are normal on palpation. A pelvic ultrasound shows no lesions. A Pap smear is normal. Her husband's sperm count is normal. Which of the following is most likely to be the cause for her infertility?

- A Adenomyosis
- B Adenohypophyseal prolactinoma
- C Pelvic inflammatory disease
- D Mature cystic teratoma
- E Chronic cervicitis

Answer:C

Question 22

A 19-year-old woman has noted increasing size and number of warty lesions on her external genitalia for the past 5 years. On physical examination she has several pink-tan rounded 1 to 2 cm slightly raised, rough lesions on the perineum and vulva. Biopsy of one lesion is performed and on microscopic examination shows acanthosis of squamous epithelium along with koilocytosis. Which of the following is the most likely risk factor for these lesions?

- A Irritant chemical exposure
- B Oral contraceptive use
- C Candida vulvovaginitis
- D Multiple sexual partners
- E Turner syndrome

Answer:D

Question 23

A 40-year-old woman has experienced pelvic discomfort for over a month, along with a 4 kg weight loss, nervousness, and diaphoresis. A pelvic examination reveals a large left adnexal mass that, on transvaginal ultrasound, appears as a discrete 10 cm cystic and solid mass. The uterus appears normal in size. A Pap smear is normal. The mass is removed and on gross pathologic examination is filled with hair and sebum, along with solid tan areas next to the smooth-surfaced outer wall. Which of the following laboratory test findings is most likely to have been present just prior to her surgery?

- A Thyroxine of 11.3 microgm/dL
- B HCG of 45,000 IU/L
- C Potassium of 2.9 mmol/L
- D Estradiol of 1700 pg/mL
- E Cancer antigen 125 of 540 U/mL

Answer:A

Question 24

A 32-year-old G3 P2 woman goes for a routine prenatal check at 12 weeks gestation. On physical examination she is found to be large for dates, and no fetal heart tones are audible. An ultrasound is performed and revealed that no fetus was present, only many echogenic cystic areas within the uterus. Which of the following is the most likely diagnosis?

- A Invasive mole
- B Partial hydatidiform mole
- C Placental site trophoblastic tumor
- D Choriocarcinoma
- E Complete hydatidiform mole

Answer:E

Question 25

A 37-year-old woman goes to her physician for a routine checkup. On physical examination there are no abnormal findings. A Pap smear is taken and cytologically there are dysplastic cells present. A cervical biopsy is performed. Microscopic examination shows dysplasia involving the full thickness of the cervical epithelium. Which of the following is the most likely diagnosis?

- A High grade squamous intraepithelial lesion (HSIL)
- B Severe chronic cervicitis with herpes simplex virus (HSV)
- C Diethylstilbestrol (DES) exposure
- D Endocervical adenocarcinoma
- E Extramammary Paget disease

Answer:A

Question 27

A 39-year-old woman has had dysmenorrhea for 7 months. On pelvic examination, there are no adnexal masses, and the cervix appears normal, but the uterus is three times normal size. The uterus appears to be symmetrically enlarged on abdominal ultrasound, with no masses present and an endometrial cavity that is nearly normal in size. A Pap smear is normal. Her serum pregnancy test is negative. A total abdominal hysterectomy is performed. Which of the following microscopic findings is most likely to be present in her uterus?

- A Atypical glands invading through the uterine wall
- B Large avascular villi with trophoblastic proliferation
- C Hyperchromatic and pleomorphic smooth muscle cells
- D Extensive acute inflammation
- E Endometrial glands and stroma in the myometrium

Answer:E

Question 30

A 33-year-old woman has an infertility workup. Her BMI is 32. Hirsutism is noted. On pelvic examination, bilateral adnexal masses are palpated. Transvaginal ultrasound examination shows a normal sized uterus, but the ovaries are enlarged and have a dozen peripheral echogenic follicles. Laboratory studies show hyperglycemia and increased androgenic steroids. For which of the following conditions is she at greatest risk?

- A Endometrial hyperplasia
- B Adenomyosis
- C Malignant mixed müllerian tumor
- D Chronic endometritis
- E Borderline mucinous tumor

Answer:A

Question 31

A 24-year-old woman is G2 P1. Her first pregnancy resulted in a normal term birth. Now at 15 weeks gestation, a prenatal checkup reveals that she has a blood pressure of 140/90 mm Hg. An ultrasound is performed that reveals no fetal cardiac motion. Misoprostol induction is performed for termination of the pregnancy. Examination of the malformed stillborn fetus reveals that it is small for gestational age and has 3,4 syndactyly bilaterally, an indented nasal bridge, and a two vessel cord. The placenta is small for gestation and has scattered 0.5 cm grape-like villi. A chromosome analysis performed on the placental tissue will most likely demonstrate which of the following karyotypes?

- A 46, XX
- B 69, XXY
- C 45, X
- D 47, XX, +18
- E 23, X
- F 47, XYY
- G 47, XXX

answer:B

Question 33

A 38-year-old healthy woman has had a white, curd-like vaginal discharge for the past week. There is no bleeding. A Pap smear demonstrates normal appearing squamous epithelial cells along with scattered neutrophils and budding cells with pseudohyphae. Which of the following infectious agents is most likely to be present in this woman?

- A *Treponema pallidum*
- B *Neisseria gonorrhoea*
- C *Chlamydia trachomatis*
- D Herpes simplex virus
- E *Escherichia coli*
- F *Gardnerella vaginalis*
- G *Trichomonas vaginalis*
- H *Candida albicans*
- I Human papillomavirus

Answer:H

Question 34

A 35-year-old woman has had dull pelvic pain for 4 months. A pelvic examination reveals a normal appearing cervix, a normal sized uterus, and a large tender right adnexal mass. Ultrasound reveals an 8 cm cystic, fluid-filled mass involving the right adnexal region. At laparotomy, there are many filmy fibrous adhesions in the pelvis. The mass is excised and on gross examination is found to have a thin wall and is filled with purulent exudate. Microscopically, there are thin remnants of fallopian tube and ovary comprising the wall of the mass, with numerous neutrophils filling the lumen. Which of the following infectious agents is most likely to have produced these findings?

- A Human papillomavirus
- B *Mycobacterium tuberculosis*
- C *Trichomonas vaginalis*

D *Candida albicans*

E *Neisseria gonorrhoeae*

Answer:E

Question 35

Abnormal bleeding per vagina for the past 5 months prompts a 62-year-old woman to see her physician. She has never been pregnant and went through menopause 10 years previously. On physical examination her BMI is 33. There are no abnormal findings on physical examination. An endometrial biopsy is performed and on microscopic examination shows a well-differentiated endometrial adenocarcinoma. Which of the following ovarian neoplasms is she most likely to have?

A Papillary serous cystadenocarcinoma

B Krukenberg tumor

C Mucinous cystadenoma

D Granulosa cell tumor

E Immature teratoma

Answer:D

Question 36

A 28-year-old woman develops the sudden onset of severe lower abdominal pain. On physical examination there is tenderness to palpation of the right lower quadrant. Laboratory studies show her serum pregnancy test is positive. An ultrasound scan does not reveal a gestational sac in the uterus, but there is a right adnexal mass. The development of these findings is most closely related to past infection with which of the following organisms?

A *Treponema pallidum*

B Human papillomavirus

C *Neisseria gonorrhoeae*

D *Candida albicans*

E Group B *Streptococcus*

Answer:D

Question 38

A 72-year-old woman has had fatigue for the past year, along with episodes of vaginal bleeding. On physical examination there are no abnormal findings. Laboratory studies show Hgb 9.1 g/dL, Hct 26.5%, MCV 72 fL, platelet count 158,000/microliter, and WBC count 7150/microliter. An endometrial biopsy is performed and on microscopic examination shows atypical adenomatous hyperplasia. Which of the following is the most likely risk factor for development of her disease?

- A Human papillomavirus infection
- B Long term intrauterine contraceptive device use
- C Chronic endometritis
- D Pelvic inflammatory disease
- E Unopposed estrogenic stimulation

Answer:E

Question 39

A 56-year-old G0 P0 woman reports vaginal bleeding in the past 2 months. Her last menstrual period was 6 years ago. On physical examination there are no abnormal findings. Which of the following procedures is most appropriate to perform on this woman?

- A Endometrial biopsy
- B Pap smear
- C Vaginal culture
- D Colposcopy
- E CT scan

Answer:A

Question 40

A 50-year-old woman has experienced mild pelvic discomfort for 3 months. On physical examination there are bilateral adnexal masses. A pelvic CT scan reveals irregular unilocular cystic, bilateral mass lesions in the region of the ovaries. One is 10 cm and the other is 8 cm in size. Which of the following types of neoplasm is most likely to be present in this woman?

- A Mature cystic teratoma
- B Serous cystadenocarcinoma
- C Endometrioid carcinoma
- D Fibrothecoma
- E Mucinous cystadenoma

Answer:B

Breast disease

Question 1

A 52-year-old woman has felt a lump in her breast for the past 2 months. On physical examination a firm 2 to 3 cm mass is palpable in the upper outer quadrant of her right breast. There are no palpable axillary nodes. A lumpectomy with axillary node dissection is performed. The breast lesion is found to have positive immunohistochemical staining for HER2/neu (c-erb B2). Staining for estrogen and progesterone receptors is negative. Which of the following treatment options is most likely to be efficacious in this woman?

- A Letrozole
- B Tamoxifen
- C Trastuzumab
- D Prednisone
- E Doxorubicin

Answer:C

Question 2

A 47-year-old woman undergoes routine mammographic screening and there are multiple small areas of increased density, though a single distinctive mass lesion is not detectable either by palpation or by mammography. A fine needle aspiration biopsy of an abnormal density reveals cells suspicious for a malignancy. An excisional breast biopsy yields a diagnosis of lobular carcinoma in situ of the breast. Which of the following is the most likely finding associated with this woman's carcinoma?

- A No residual carcinoma
- B Opposite breast involvement
- C Absent family history of breast cancer
- D Concomitant Paget disease of the nipple
- E Negative estrogen receptor assay

Answer:B

Question 4

A 20-year-old woman notes a mass in her left breast after following the directions for breast self-examination provided by her health clinic. Her physician palpates a firm, 1 to 2 cm mass. There is no nipple discharge and no pain. No axillary adenopathy is present. The overlying skin of the breast appears normal. Her left breast is slightly larger than the right, a condition she says has been present since puberty. Her urine pregnancy test is negative. Mammography confirms the presence of a rounded density, which has no microcalcifications, and reveals no lesions of the opposite breast. Which of the following is the most likely diagnosis?

- A Focus of fat necrosis
- B Fibroadenoma
- C Intraductal papilloma
- D Infiltrating ductal carcinoma
- E Phyllodes tumor

Answer:B

Question 5

A 19-year-old woman gave birth to a healthy male infant at term following an uncomplicated pregnancy. She has now been breast feeding the baby for a month, but notes that her left breast has gradually become swollen and painful to touch over the past week. On physical examination her temperature is 38.2°C. Which of the following is the most likely diagnosis?

- A Acute mastitis
- B Fibrocystic disease
- C Fat necrosis
- D Intraductal papilloma
- E Galactocele

Answer:A

Question 6

A 35-year-old woman has noted a palpably firm, irregular mass in her right breast for the past 3 months. On physical examination there is no tenderness or swelling. By mammography there is an irregular 2 cm density that contains scattered microcalcifications. Biopsy of this mass reveals extensive fat necrosis. Which of the following is the most likely cause for this breast lesion?

- A Pregnancy
- B Prolactinoma
- C Trauma
- D Fibrocystic changes
- E Lobular carcinoma in situ
- F Mastitis

Answer:C

Question 7

A study of postpartum women is performed. Some of them developed a palpable 'lump' in one or both breasts postpartum. The lump appeared following cessation of breast feeding and persisted for more than one month, Many of these lumps regressed following fine needle aspiration. Which of the following breast lesions is most likely to fulfill these criteria?

- A Papilloma
- B Fat necrosis
- C Galactocele
- D Ductal epithelial hyperplasia
- E Sclerosing adenosis

Answer:C

Question 8

A 49-year-old woman notes increasing size to her right breast over the past year. This breast is not painful, but the heaviness causes some discomfort. On physical examination the overlying skin and nipple appear normal. There is no nipple discharge. There is no axillary lymphadenopathy. Mammography reveals a solid 12-cm circumscribed mass. The mass is biopsied, and on microscopic examination shows a cellular stromal component along with an epithelial component. Which of the following is the most likely diagnosis?

- A Fibroadenoma
- B Phyllodes tumor
- C Sclerosing adenosis
- D Hamartoma
- E Medullary carcinoma

Answer:B

Question 10

A 52-year-old woman feels a lump in her right breast on self-examination and goes to her physician. On physical examination the 4 cm mass is not freely movable and feels quite hard. A fine needle aspirate is performed and cytologic examination shows cells are present consistent with carcinoma. Which of the following features of this carcinoma is most likely to suggest a worse prognosis?

- A Estrogen receptor positivity
- B Family history of breast carcinoma
- C Presence of an in-situ component
- D Axillary lymph node metastases
- E Lack of aneuploidy

Answer:D

Question 11

A 45-year-old woman feels a 'lump' in her left breast. Her physician palpates a 2 cm irregular area in the upper outer quadrant. A biopsy is performed and microscopic examination shows no evidence for carcinoma. Which of the following microscopic findings in this biopsy is most likely to suggest an increased risk for subsequent development of breast carcinoma?

- A Atypical hyperplasia
- B Sclerosing adenosis
- C Apocrine metaplasia
- D Galactocele
- E Multiple cysts

Answer:A

Question 12

A 20-year-old woman gives birth to a term girl infant following an uncomplicated pregnancy. She breast feeds the infant. Six weeks later, her left breast becomes painful and slightly swollen. On physical examination there is a tender 3 cm mass in the left breast beneath a nipple that shows several painful fissures. Which of the following pathologic findings is most likely to be present in this breast?

- A Infiltrating ductal carcinoma
- B Plasma cell infiltrate
- C Sclerosing adenosis
- D *Staphylococcus aureus* infection
- E Fat necrosis

Answer:D

Question 13

A 25-year-old woman palpates a left breast 'lump' on self-examination. Her nurse practitioner palpates an ill-defined mass. There is no pain or tenderness. No axillary lymphadenopathy is noted. Fine needle aspiration is performed and cytologic examination shows cells that appear benign. The lesion persists, and 6 months later another biopsy is taken and shows ductal epithelial proliferation with ductal apocrine metaplasia, stromal fibrosis, and sclerosing adenosis. Which of the following is the most likely diagnosis?

- A Infiltrating ductal carcinoma
- B Ductal carcinoma in situ
- C Lobular carcinoma in situ
- D Fibrocystic changes
- E Intraductal papilloma

Answer:D

Question 14

A 39-year-old woman has noted red, scaling area on her breast for 3 months. On physical examination there is an eczematous 1 cm diameter area on the skin of the right breast areola. There is no palpable lump in this breast. Biopsy of the skin lesion is performed and on microscopic examination shows large cells at the dermal-epidermal junction that stain positively for mucin. Which of the following is the most likely diagnosis?

- A Nipple discharge
- B Paget disease of breast
- C Intraductal carcinoma
- D Dermatophyte infection
- E Inflammatory carcinoma
- F Eczematous dermatitis

Answer:B

Question 15

A 39-year-old woman has noted a bloody nipple discharge from the right breast for the past 5 weeks. On physical examination there is no palpable mass or tenderness. The skin of this breast shows no lesions. A small amount of bloody fluid can be expressed from the right nipple. Which of the following is the most likely diagnosis?

- A Mastitis
- B Intraductal papilloma
- C Trauma
- D Infiltrating ductal carcinoma
- E Tuberculosis
- F Fibrocystic changes

Answer:B

Question 16

A 61-year-old woman has noted a rough, reddened appearance increasing in size over the skin of her right breast for the past 5 months. This persists despite application of a corticosteroid cream. On physical examination the skin over the right breast is indurated, roughened, and reddish-orange. There is nipple retraction. A firm, irregular 5 cm mass is palpable in this breast. Which of the following is the most likely risk factor for this woman's condition?

- A Cigarette smoking
- B Prior fibrocystic disease
- C Multiparity
- D Family history
- E Human papillomavirus infection

Answer:D

Question 17

A 41-year-old woman has felt a large breast lump that has increased slowly in size for the past 3 years. On physical examination there is a 9 cm firm, movable mass present in her left breast. The overlying skin appears normal; there is no axillary lymphadenopathy. The mass is excised and grossly appears soft and fleshy. On microscopic examination this mass has a lymphoid stroma with little fibrosis surrounding sheets of large vesicular cells with frequent mitoses. Which of the following is the most likely diagnosis?

- A Infiltrating ductal carcinoma
- B Colloid carcinoma
- C Medullary carcinoma
- D Lobular carcinoma
- E Phyllodes tumor
- F Diffuse large B cell lymphoma

Answer:C

Question 18

A clinical study is performed involving subjects who are women ranging in age from 15 to 45 years who palpated breast 'lumps' on self-examination. The presence of breast mass lesions in these subjects was subsequently confirmed by physical examination and by mammography. All subjects had a needle biopsy or excision of their lesion performed, with a definitive pathologic diagnosis made. Which of the following diagnoses is likely to be the most frequently made in these subjects?

- A Abscess
- B Fibroadenoma
- C Fibrocystic changes
- D Lobular carcinoma in situ
- E Infiltrating ductal carcinoma

Answer:C

Question 19

A 61-year-old woman has increasing dyspnea with chest pain for the past 4 months. On physical examination there is dullness to percussion over both lungs. A chest x-ray shows bilateral pleural effusions. A thoracentesis yields bloody fluid that cytologically contains small malignant cells forming long rows or rings. A mammogram shows an irregular area of architectural disortion in her left breast. Which of the following histologic types of breast cancer is most likely to be present in this woman?

- A Lobular
- B Ductal
- C Medullary
- D Tubular
- E Papillary

Answer:A

Question 20

A 30-year-old woman has felt a mass in her right breast for 6 months. On physical examination there is a 5 cm right breast mass and firm, non-tender lymphadenopathy. A fine needle aspiration is performed and cytologic examination shows carcinoma cells. A right mastectomy with axillary lymph node dissection is performed. Microscopic examination shows a poorly differentiated carcinoma that is negative for estrogen and progesterone receptors and negative for HER2/neu. One axillary lymph node demonstrates micrometastases. Her 32 year old sister is found to have a similar lesion. Which of the following is the most likely risk factor for this woman's breast cancer?

- A BRCA1 mutation
- B Late menarche
- C Positive antinuclear antibody test
- D Exposure to hydrocarbon compounds
- E Prior fibrocystic changes

Answer:A

Question 21

A 45-year-old woman has noted a mass in her right breast for 7 months. On physical examination there is a 5 cm diameter right breast mass. A biopsy of the mass is performed and on microscopic examination a carcinoma is present. Which of the following pathologic findings involving this lesion suggests a better prognosis for this woman?

- A Estrogen receptor negative
- B Axillary lymph node metastasis
- C Age at diagnosis
- D Aneuploidy by flow cytometry
- E Intraductal histologic pattern

Answer:E

Question 23

A study of breast carcinomas is conducted. Some of these carcinomas are found to be 'triple negative' for estrogen receptor, progesterone receptor, and HER2. Which of the following microscopic findings is most characteristic for these triple negative breast carcinomas?

- A Inflammatory component
- B Multifocality
- C High grade
- D Tubular growth pattern
- E Desmoplasia

Answer:C

Question 24

A 49-year-old woman goes to her physician for a routine health maintenance examination. A screening mammogram is performed and shows a 3 cm irregular density in her left breast that has microcalcifications. A needle biopsy of this area shows ducts containing solid sheets of malignant cells, with central necrosis and calcification. There is no invasion. A lumpectomy with wide excision to clear margins is performed along with axillary lymph node sampling that shows no metastases. Malignant cells are positive for HER2 but negative for estrogen receptor. Which of the following is the most likely outcome for this woman?

- A Recurrence in the opposite breast
- B Cure with no further therapy
- C Response to therapy with tamoxifen
- D Development of inflammatory carcinoma
- E Her children will inherit a BRCA1 mutation

Answer:B

Question 25

A 69-year-old woman has a screening mammogram that shows an irregular 1 to 2 cm density in her right breast. She has no axillary lymphadenopathy. A needle biopsy is performed and on microscopic examination shows malignant cells floating in mucinous lakes. The nuclei show minimal pleomorphism and no mitoses are seen. The cells are positive for estrogen receptor and negative for HER2 (c-erb B2). A chest x-ray shows no abnormal findings. A bone scan is negative. What is the most likely designation for grade and stage of this neoplasm?

- A Grade I, Stage T1 M0 N0
- B Grade I, Stage T2 M1 N1
- C Grade II, Stage T3 M0 N0
- D Grade II, Stage T2 M0 N1
- E Grade III, Stage T3 M0 N1

Answer:A

Question 26

A 66-year-old man has observed an enlarging lump near the right nipple for 5 months. On examination there is a firm, fixed 1.5 cm nodule beneath the right areola. The mass is excised and axillary lymph node sampling performed. The mass and one lymph node examined microscopically show ductal carcinoma. Which of the following germline mutations is most likely present in this man?

- A APC
- B BRCA2
- C NF1
- D TP53
- E VHL

Answer:B

Question 27

A 29-year-old woman notes a lump in her left breast. The lump remains through 2 menstrual cycles without change in size. A screening ultrasound examination is performed and there is a 1.5 cm fluid-filled cyst within the inner upper quadrant of the left breast. Fine needle aspiration is performed and clear fluid and some cells are obtained. A year later there is no palpable lump. Which of the following cells were most likely present in her breast lesion?

- A Atypical ductal epithelial cells
- B Fibroblasts
- C Lobular carcinoma cells
- D Metaplastic apocrine cells
- E Neutrophils
- F Small mature lymphocytes

Answer:D

Prostatic :

A 70-year-old healthy man has a routine check-up. On physical examination there is a firm nodule palpable in the prostate via digital rectal examination. Prostate biopsies are performed and on microscopic examination show small, crowded glands containing cells with prominent nucleoli within the nuclei. Which of the following is the most likely diagnosis?

- A Adenocarcinoma
- B Nodular hyperplasia
- C Chronic prostatitis
- D Urothelial carcinoma
- E Recent infarction

Answer:A

A 72-year-old man gets up several times during a football match to go to the restroom to urinate, even though he has had only one beer. This is a problem that has plagued him for 4 years. When he visits his physician for a checkup, on physical examination he has a diffusely enlarged prostate palpated on digital rectal examination. Laboratory studies show his serum prostate specific antigen is 6 ng/mL. Which of the following pathologic findings is most likely to be present in this man?

- A Adenocarcinoma
- B Acute inflammation
- C Multiple infarctions
- D Nodular hyperplasia
- E Granulomas

Answer:D

A 77-year-old man has a routine check-up by his physician. The only physical examination finding is slight nodularity of his prostate on digital rectal examination. Laboratory studies show a serum prostate specific antigen of 6 ng/mL. A prostate biopsy is performed and on microscopic examination shows prostatic intraepithelial neoplasia (PIN). Which of the following is the best medical care option to offer this man?

- A Radical prostatectomy
- B Multiagent chemotherapy
- C Transurethral prostate resection
- D Monitoring PSA levels
- E Nothing

Answer:D

A 55-year-old man has experienced pain with urination for the past week. On physical examination his prostate is slightly enlarged and mildly tender to palpation on digital rectal examination. His temperature is 37.5°C. Laboratory studies show a WBC count is 12,910/microliter. Urine culture grows >100,000/mL *Escherichia coli*. His serum prostate specific antigen is 7 ng/mL. He receives antibiotic therapy and improves. This condition recurs 5 times in the next 6 months. Which of the following diseases is he most likely to have?

- A Nodular prostatic hyperplasia
- B Prostatic adenocarcinoma
- C Chronic bacterial prostatitis
- D Urothelial carcinoma
- E Prostodynia

Answer:C

A pathologic study is performed in men ranging from 50 to 100 years of age who had serum prostate specific antigen levels above 15 ng/mL and who underwent prostatectomy following biopsies in which there was adenocarcinoma on microscopic examination. The resected prostates were examined pathologically and the sites of the adenocarcinomas mapped within the prostate. In which of the following regions of the prostate are these adenocarcinomas most likely to arise?

- A Anterior fibromuscular stroma
- B Central zone
- C Peripheral zone
- D Periurethral zone
- E Transitional zone

Answer:C

A double blind study is conducted involving men who have been symptomatic from urinary frequency and hesitancy for 5 or more years. One group men receive a pharmacologic agent designed to reduce the synthesis of dihydrotestosterone in prostatic stromal cells. Another group receives a placebo. The group receiving the drug has a statistically significant decrease in symptoms. Which of the following enzymes is this pharmacologic agent most likely to block?

- A 5-alpha-reductase
- B Aromatase
- C 17-alpha-hydroxylase
- D Desmolase
- E 11-beta-hydroxylase

Answer:A