1. A 28 year-old female, who has experienced occasional painful migratory arthralgias, complains now of a tender, swollen, and hot left ankle. The joint was aspirated and the synovial fluid showed 55,000 WBCs, 75% polymorphonuclear lymphocytes, low glucose level, and no crystals. Which of the following would be the most likely diagnosis?

A. Rheumatoid arthritis
B. Septic arthritis
C. Gouty arthritis
D. Osteoarthritis

Answer: B. Septic arthritis

Septic arthritis presents with a large number of WBCs, predominantly polymorphonuclear, and with glucose levels much lower than serum levels.

2. When the diagnosis of gonococcal urethritis is confirmed, which of the following is the treatment of choice?

A. Ceftriaxone (Rocephin)
B. Azithromycin 1g orally in a single dose
C. Ceftriaxone 250 mg IM in a single dose PLUS Azithromycin 1g orally in a single dose

D. Doxycycline (Vibramycin)

Answer: C. Ceftriaxone 250 mg IM in a single dose PLUS Azithromycin 1g orally in a single dose

Because of resistance, the CDC now recommends dual therapy with Ceftriaxone 250 mg IM in a single dose PLUS Azithromycin 1g orally in a single dose. Alternative regimens if ceftriaxone is not available include Cefixime 400 mg orally in a single dose PLUS Azithromycin 1 g orally in a single dose.

3. Erythema nodosum is characterized by

A. subcutaneous red tender nodules.
B. brown pigmentation on the lower extremities.
C. tender lymph nodes in the groin.
D. scaling red macules.

Answer: A, subcutaneous red tender nodules.

Erythema nodosum produces erythematous red tender nodules, especially on the shins.

4. Use of systemic corticosteroids can cause which of the following adverse effects in the eye?

A. Cortical blindness
B. Optic atrophy
C. Glaucoma
D. Papilledema
5. It is determined that a woman has a nonexistent rubella titer level during her first trimester of pregnancy. When should she receive the rubella vaccine?

A. During the first trimester of pregnancy  
B. During the second trimester of pregnancy  
C. During the third trimester of pregnancy  
D. After delivery of the infant

Answer: D. After delivery of the infant

The patient should not receive the rubella vaccine during the course of her pregnancy as the possibility of transmission of the rubella virus does exist. During the time that the patient is without protective titer she should avoid anyone with active rubella infection. The proper time to receive the vaccine is after delivery of the infant.

6. A patient with which of the following is at highest risk for coronary artery disease?

A. Congenital heart disease  
B. Polycystic ovary syndrome  
C. Acute renal failure  
D. Diabetes mellitus

Answer: D. Diabetes mellitus
Patients with diabetes mellitus are in the same risk category for coronary artery disease as those patients with established atherosclerotic disease.

7. A 44 year-old female presents with ongoing arthralgias and myalgias with intermittent flares of arthritis. She is found to have a malar rash that worsens with sun exposure. She is known to have progressive renal damage and has recurrent infections that are slow to respond to therapy. She takes ibuprofen (Motrin) as needed for her joint pain and takes no other medication. Which of the following tests would be the initial test recommended to screen for this diagnosis?

A. Rheumatoid factor
B. Antihistone antibodies
C. Anti-Smith (Anti-Sm) antibodies
D. Anti-nuclear antibodies (ANA)

Answer: D Anti-nuclear antibodies (ANA)
ANA’s are the best screening test used in the evaluation for SLE.

8. Upon stroking of the lateral aspect of the sole from the heel to the ball of the foot, the great toe dorsiflexes and the other toes fan. This is a positive

A. Kernig's sign.
B. Brudzinski's sign.
C. Babinski's sign.
D. Gower's sign.

Answer: C. A Babinski test is performed by stroking the lateral aspect of the sole from the heel to the ball of the foot, the great toe dorsiflexes and the other toes fan in a positive test.
For your knowledge:

Kernig’s sign is positive when pain is noted on straightening the knee after flexing both the hip and knee.

Brudzinski’s sign occurs with neck flexion resulting in resultant flexion of the hips. It is a sign of meningeal irritation.

A positive Gower’s sign is noted in certain types of muscular dystrophy and is described as children rising to stand by rolling over prone and pushing off the floor with arms while the legs remain extended.

9. Which of the following strategies promotes improved carbohydrate metabolism and is recommended for all Type 2 diabetic patients?

A. Low-carbohydrate, high protein diet
B. Routine aerobic exercise
C. Metformin (Glucophage)
D. Acupuncture

Answer: B. Routine aerobic exercise

Routine exercise improves carbohydrate metabolism and insulin sensitivity.

10. Acute rebound hypertensive episodes have been reported to occur with the sudden withdrawal of

A. verapamil (Calan).
B. lisinopril (Prinivil).
C. clonidine (Catapres).
D. hydrochlorothiazide (HCTZ)

Answer: C. Clonodine
Clonidine (Catapres) is a central alpha agonist and abrupt withdrawal may produce a rebound hypertensive crisis.