

1. Choose the correct answers

- a) Adult *Ascaris* worms live for 1–2 years in humans
- b) A large *Ascaris* worm can enter and occlude the biliary tree, causing biliary colic, cholecystitis, cholangitis, pancreatitis, or (rarely) intrahepatic abscesses.
- c) In small children, migration of an adult *Ascaris* worm up the esophagus can provoke coughing and oral expulsion of the worm.
- d) In intestinal phase of ascariasis the eosinophils play a central role in host defense.
- e) In ascariasis, upon onset of larval encystment in muscle, symptoms of myositis with myalgias, muscle edema, and weakness develop, usually overlapping with the inflammatory reactions to migrating larvae.

2. Choose the correct answers

- a) Slowly enlarging echinococcal cysts generally remain asymptomatic until their expanding size or their space-occupying effect in an involved organ elicits symptoms.
- b) In echinococcosis *granulosus*, humans are intermediate hosts, with larval-stage parasites present in the tissues;
- c) The liver and the lungs are the most common sites of *E. granulosus* cysts
- d) Extraintestinal echinococcosis is a constellation of findings based on vascular instability and decreased vascular integrity.
- e) Patients with *Echinococcus granulosus* liver abscess usually have concurrent intestinal echinococcosis

3. Choose the correct answers

- a) Visceral disease (kala-azar) is typically caused by *L. donovani* and may be life-threatening.
- b) Co-infected patients with *Visceral leishmaniasis* and HIV usually respond well initially to standard therapy with amphotericin B or pentavalent antimony compounds.
- c) *Leishmania* organisms are transmitted by phlebotomine sandflies of the genus *Phlebotomus* in the “Old World” (Asia, Africa, and Europe) and the genus *Lutzomyia* in the “New World” (the Americas).
- d) In VL, lung abscesses can be single or multiple but usually are marked by a single dominant cavity >2 cm in diameter
- e) *L. infantum* is an increasingly important cause of meningitis in neonates, pregnant women, individuals >60 years, and immunocompromised individuals of all ages

4. Choose the correct answers

- a) After human consumption of trichinous meat, encysted larvae are liberated by digestive acid and proteases
- b) The *Trichinella* larvae invade the small-bowel mucosa and mature into adult worms
- c) In trichinellosis, invasion of the gut by large numbers of parasites occasionally provokes diarrhea during the first week after infection.
- d) Although most infections in trichinellosis are mild and asymptomatic, heavy infections can cause severe enteritis, periorbital edema, myositis, and (infrequently) death.
- e) In humans, female worms of *Trichinella* release newborn larvae that migrate to the feces.

5. Choose the correct answers

- 1) In cholera, if fluids and electrolytes are not replaced, hypovolemic shock and death may ensue.
- 2) Cholera is predominantly a pediatric disease in endemic areas, but it affects adults and children equally when newly introduced into a population.
- 3) In cholera, in intestinal epithelial cells, cyclic AMP inhibits the absorptive sodium transport system in villus cells and activates the secretory chloride transport system in crypt cells.
- 4) After a 2- to 3- weeks incubation period, cholera characteristically begins with the sudden onset of painless watery diarrhea that may quickly become voluminous.
- 5) In severe cholera, signs of coagulation activation may be present, varying from borderline abnormalities to a serious derangement compatible with DIC.

6. Choose the correct answers

- 1) In some VHF infections, direct damage to the vascular system or even to parenchymal cells of target organs is an important factor; in other VHF, soluble mediators are thought to play a major role in the development of hemorrhage or fluid redistribution.
- 2) In some VHFs, specific organs may be particularly impaired.
- 3) Shock, multifocal bleeding, and CNS involvement (encephalopathy, coma, seizures) are all poor prognostic signs in VHF.
- 4) Viral hemorrhagic fevers are caused by four major groups of viruses: Herpesviridae, Adenoviridae, Enteroviridae, Hepadnaviridae.
- 5) VHF occur only in Africa and South America and are restricted to areas where the host species live.

7. Choose the correct answers

- 1) People may get sick with Q fever by eating contaminated, unpasteurized dairy products.
- 2) *C. burnetii* is a small obligate intracellular gram-negative bacterium that has tropism for RBC and lymphocytes.
- 3) In more than 70% of cases, acute Q fever develops into a chronic infection that manifests as interstitial pneumonia.
- 4) The first classic symptom of Q fever, which appeared at 8-9 hours (median time), is the rapidly evolving petechial or purpuric rash.
- 5) *C. burnetii* plays a role in the development of some cancers, including certain lymphomas and nasopharyngeal cancer.

8. Choose the correct answers

- 1) The diagnosis of malaria rests on the demonstration of asexual forms of the parasite in stained peripheral-blood smears.
- 2) In all endemic areas, the WHO now recommends artemisinin-based combinations (ACTs) as first-line treatment for uncomplicated falciparum malaria.
- 3) In severe malaria, when the patient is unconscious, the blood glucose level should be measured every 4–6 h.
- 4) Recommendations for chemoprophylaxis in malaria do not depend on knowledge of local patterns of *Plasmodium* species drug sensitivity.
- 5) In malaria, to eradicate persistent liver stages and prevent relapse, primaquine should be given daily for 14 days to patients with *P. malaria* infections.

9. Choose the correct answers

- a) Infected children and adults with *Enterobius* should be treated with mebendazole (100 mg once)
- b) Infected persons with *Enterobius* should be treated with albendazole (400 mg once)
- c) In enterobiasis antihelmintic treatment need to be repeated after 2 weeks
- d) Treatment of household members is advocated to eliminate asymptomatic reservoirs of potential reinfection
- e) In enterobiasis antihelmintic treatment is not need to be repeated, unique dosage is sufficient to eradicate disease

10. Choose the correct answers

- 1) In Rickettsial spotted fever are common: eschar at the inoculum site and maculopapular rash on proximal extremities, spreading to trunk and face
- 2) Confusion and coma are common in severe epidemic louse-bourne typhus
- 3) *Rickettsia conorii* is prevalent in southern Europe, Africa, and southwestern and south-central Asia
- 4) The usual setting for RMSF is a site of war or natural disaster in which people are exposed to body lice.
- 5) The dose-dependent incubation period of Rickettsial diseases is ~6 months