

Chapter 12

INFESTATIONS

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1. The following are associated with intestinal helminths in children
 - a. Protein Energy Malnutrition
 - b. Low scores on test of cognitive ability
 - c. Deficit in height for age
 - d. Deficit in interpersonal and emotional skills
 - e. Iron deficiency anaemia

2. The following infestations are from eating undercooked meat
 - a. *Paragonimus westermani*
 - b. *Enterobius vermicularis*
 - c. *Taenia solium*
 - d. *Diphyllobothrium latum*
 - e. *Trichinella spiralis*

3. Ascariasis
 - a. Is the most prevalent human helminthiasis globally.
 - b. Aerosol displacement of the ova plays an important role in transmission
 - c. Larval stage of the disease occurs in the small intestine.
 - d. Warm climate and wet soil favour survival of the eggs.
 - e. Ingestion of raw fruits and vegetables commonly enhances transmission.

4. The following clinical conditions are commonly associated with Ascariasis
 - a. Exacerbation of Vitamin A deficiency
 - b. Pancreatitis
 - c. Protein energy malnutrition
 - d. Intestinal obstruction
 - e. Loeffler's Syndrome

5. To make a definitive diagnosis of Ascariasis, the following investigations are Necessary.

- a. Kato-Katz thick faecal smear examination.
- b. Radioisotope scanning of the intestines
- c. Abdominal X-ray
- d. Barium enema
- e. Blood film report

6. Concerning treatment of Ascariasis

- a. Chemotherapeutic agents are effective especially during the pulmonary phase of infection.
- b. Mebendazole is the treatment of choice for intestinal or biliary obstruction.
- c. Piperazine citrate acts by causing neuromuscular paralysis of the parasite and rapid expulsion of the worms.
- d. Surgical intervention may be a mode of treatment.
- e. Nitazoxanide can be used

7. Control measures for the prevention of Ascaris infection include

- a. Universal treatment to all individuals in areas of high endemicity.
- b. Targeted treatment to high risk groups
- c. Short course triple therapy for three days is the most useful prophylactic measure.
- d. Improvement of sanitary conditions should be encouraged.
- e. Education and discontinuing the practice of using human faeces as fertilizer are the most effective long term preventive measure.

8. Concerning the hookworms

- a. *Ancylostoma duodenale* is the most common cause of hookworm infection globally.
- b. Infection occurs primarily through hand to mouth ingestion of contaminated food with eggs of the worm.
- c. The larval stages need a warm, moist, shady soil for development.
- d. Economic underdevelopment and poverty may be associated with hookworm infestation.
- e. Extra intestinal migration identical to *Ascaris* and *Strongyloides stercoralis* occurs,

9. The following are clinical manifestations of hookworm disease
 - a. Protein Energy malnutrition
 - b. Chlorosis
 - c. Cutaneous larva migrans
 - d. Iron deficiency
 - e. Eosinophilic eventing

10. The following are correct in making a diagnosis of hookworm disease
 - a. Quantitative method of detecting is advisable
 - b. Blood film examination is unnecessary
 - c. Direct faecal examination can distinguish *Necator americanus* from *Ancylostoma duodenale*.
 - d. Polymerase chain reaction method has been developed
 - e. Serum Protein estimation is useful

11. Cutaneous larva migrans occur in the following
 - a. *Strongyloides stercoralis*
 - b. *Necator Americanus*
 - c. *Ancylostoma braziliense*
 - d. *Ascaris lumbricoides*
 - e. *Trichuris trichuria*

12. The following treatment options are available in cutaneous larva migrans
 - a. No treatment
 - b. Topical thiabendazole
 - c. Albendazole
 - d. Ivermectin
 - e. All of the above

13. Concerning Toxocariasis
 - a. It is mainly caused by cat rather than dog roundworm
 - b. It is uncommon where *Ascaris* and hookworm infections are common
 - c. There is a cutaneous form
 - d. There is a visceral form
 - e. Albendazole 400mg daily for 5 days is the treatment of choice

14. Concerning Trichinosis
- The adult worms inhabit the caecum and ascending colon of humans'
 - Another name is pin worm.
 - It's an exclusive infection of the poor rural communities especially in the tropics.
 - It is rare in Muslim communities.
 - Transmission can also occur indirectly through flies or other insects.
15. The following are the most likely associated features of trichinellosis
- Myositis
 - Periorbital oedema
 - Subconjunctival haemorrhage
 - Elevated creatine phosphokinase
 - Normal eosinophil count.
16. A 7 year old male with trichuriasis presents with the following except
- Dysentery
 - Iron deficiency anaemia
 - Cognitive and developmental deficits
 - Rectal prolapse
 - Digital clubbing
17. The following statements are true about Schistosoma organisms
- Are nematodes that parasitize the bloodstream
 - Five recognized clinically important species infect humans
 - Transmission is by penetration of intact skin by cercariae
 - Adult worms are dioecious
 - Each specie has a specific saltwater snail intermediate host
18. The clinical manifestations of schistosomiasis are
- Immune mediated
 - Related to the intensity of infection
 - Specie specific
 - Organ specific
 - None of the above

19. The following features are correct in schistosomiasis
- Katayama fever is seldom seen in African children
 - Portal hypertension is associated with liver cell dysfunction
 - Ascites is exudative
 - Iron deficiency anaemia is very common
 - Seizures are uncommon in African children
20. The following are specific to *Schistosoma haematobium*
- Marked colicky abdominal pain
 - Bloody diarrhoea and tenesmus
 - Total haematuria
 - Katayama fever
 - Glomerulonephritis
21. The following are specific to *Schistosoma mansoni*
- Bloody diarrhoea and tenesmus
 - Glomerulonephritis
 - Katayama fever
 - Portal hypertension
 - Seizures
22. Laboratory data useful in the diagnosis of schistosomiasis include the following except.
- Early morning urine examination for ova
 - Eosinophiluria
 - Increased serum amylase
 - Deranged liver enzymes
 - Kato faecal smear
23. Concerning Enterobiasis
- Is caused by the whipworm *Enterobius vermicularis*
 - Affects mainly the large intestines
 - Auto infection is uncommon
 - Is of little health importance
 - Eosinophilia is not observed in most cases

24. A 5 year old male that presents to the children outpatient clinic with complaints of nocturnal insomnia is most likely to suffer from the following helminthic infestation
- Trichuriasis
 - Enterobiasis
 - Strongyloidiasis
 - Schistosomiasis
 - Ascariasis
25. Concerning Enterobiasis
- Use of an adhesive cellophane tape is needed for diagnosis
 - Routine stool samples are commonly used to demonstrate ova
 - Praziquantel is the drug of choice
 - Morning bathing and frequent changing of underclothes decrease transmission
 - Good hand hygiene is the most effective method of prevention.
26. Concerning Strongyloidiasis
- Is caused by a nematode that inhabits the small intestine
 - The rhabditiform larvae is the infective form
 - Life cycle is almost identical to hookworm
 - Human infection usually occurs via skin contact with contaminated soil
 - Hyper infection syndrome occurs
27. Patients with the following conditions are at high risk of the hyper infection Syndrome of Strongyloidiasis
- AIDS
 - Autoimmune diseases
 - Osteogenic sarcoma
 - Acute lymphoblastic leukaemia
 - Marasmus
28. A six year old that presents with cough, wheezing and haemoptysis may be suffering from any of the following helminthic infestation
- Trichuriasis
 - Enterobiasis
 - Ascariasis
 - Strongyloidiasis
 - Filariasis

29. The following tests are useful in diagnosis of Strongyloidiasis

- a. Baermann's test
- b. Enteric string test
- c. Gastric aspirate examination
- d. ELISA for IgE antibody
- e. Large intestinal biopsy

30. The following drugs are effective in the treatment of Strongyloidiasis

- a. Ivermectin
- b. Thiabendazole
- c. Mebendazole
- d. Pyrantel Palmoate
- e. Praziquantel

31. Concerning lymphatic Filariasis

- a. Wuchereria bancrofti causes the most infections in Africa
- b. Transmission occurs when the infective larvae penetrates unbroken skin
- c. The clinical syndrome is most frequently observed in young person's 10- 20 years of age
- d. Diagnosis is confirmed by demonstration of microfilariae in midnight blood samples
- e. Drug of choice is diethylcarbamazine

32. Onchocerciasis

- a. Is the world's second leading infective cause of blindness
- b. Transmission is by bite of black flies that breed in slow flowing streams
- c. Infective larva are introduced into humans during blood feeding by the Simulium flies
- d. Diagnosis can be established by skin snip examination for microfilariae
- e. Vector control and mass ivermectin distribution programs have reduced prevalence

33. Concerning Loiasis

- a. Infection commonly seen in West and Central Africa
- b. Transmission is via nocturnally biting flies
- c. Clinical manifestations are as a result of migration of microfilariae through skin, subcutaneous issue and sub conjunctivae
- d. Microfilariae may be detected in blood smears collected between 10am and 2 pm
- e. Many have concurrent infection with Onchocerca volvulus

34. Concerning Dracunculiasis

- a. It is caused by guinea worm
- b. Has intermediate host for transmission
- c. Infection is by drinking contaminated stagnant water with adult worms
- d. Diagnosis is mostly clinical
- e. Is one of the diseases for eradication by WHO

35. The following are known to occur in Dracunculiasis

- a. Staphylococcus aureus pyomyositis
- b. Aseptic arthritis
- c. Tetanus
- d. Pleural effusion
- e. None of the above

36. Match the following helminths with their infective stages

- | | |
|---------------------|------------------------|
| a. Schistosomiasis | 1. Microfilariae |
| b. Trichuriasis | 2. Cercariae |
| c. Filariasis | 3. Rhabditiform larvae |
| d. Strongyloidiasis | 4. Filariform larvae |
| e. Ascariasis | 5. Ova |

37. The following are correctly matched

- | | |
|-------------------|------------------------------------|
| a. Loiasis | 1. Subcutaneous nodule |
| b. Onchocerciasis | 2. Tropical pulmonary eosinophilia |
| c. Dracunculiasis | 3. Chronic ulcers |
| d. Trichuriasis | 4. Nocturnal perianal pruritus |
| e. Enterobiasis | 5. Calabar swellings |

38. Concerning Trichinosis

- a. A disease of the Western World
- b. Transmission is by ingestion of uncooked meat
- c. Clinical manifestation has multiorgan involvement
- d. Muscle biopsy is the mainstay of diagnosis
- e. Mebendazole is effective for both the larvae and adult worm

39. The larval stages of the following occur in the small intestine
- Ancylostoma duodenale
 - Trichuris Trichuria
 - Ascaris lumbricoides
 - Enterobius vermicularis
 - Strongyloides stercoralis
40. The adult stages of the following inhabit the large intestine
- Ancylostoma duodenale
 - Trichuris Trichuria
 - Ascaris lumbricoides
 - Enterobius vermicularis
 - Strongyloides stercoralis
41. Helminthic disease burden is highest in the following age group
- 1 - 5years
 - 6 - 15years
 - 15 -21years
 - < 6months
 - Boys > girls
42. Malabsorption commonly occurs in the following
- Enterobius vermicularis
 - Strongyloides stercoralis
 - Cappillaria philippinesis
 - Ancylostoma duodenale
 - Trichuris Trichuria
43. Blood in stool commonly occurs in the following helminthic disease
- Ancylostoma duodenale
 - Trichuris Trichuria
 - Enterobius vermicularis
 - Strongyloides stercoralis
 - Schistomiasis haemotobium
44. Weight loss is a prominent feature of which of the following
- Trichuris Trichuria
 - Ascaris lumbricoides
 - Enterobius vermicularis
 - Strongyloides stercoralis
 - All of the above

45. The following infestation may be complicated by peritonitis
- Strongyloides stercoralis
 - Ascaris lumbricoides
 - Enterobius vermicularis
 - Trichuris Trichuria
 - None of the above
46. Auto infection occurs in the following helminths
- Hymenolepis nana
 - Strongyloides stercoralis
 - Enterobius vermicularis
 - Taenia solium
 - Trichuris Trichuria
47. A blood film of hookworm associated anaemia will show the following
- Toxic granulation
 - Megaloblast
 - Hypochromic microcytic anaemia
 - Normocytic normochromic anaemia
 - Reticulocytosis
48. The most likely cause of a seizure amongst the helminths below is/are
- Taenia solium
 - Schistosoma japonicum
 - Echinococcus granulosus
 - Onchocerca volvulus
 - Trichinella spiralis
49. Pruritus Ani occurs in the following
- Taenia saginata
 - Enterobius vermicularis
 - Trichuris Trichuria
 - a and b only
 - Ascaris lumbricoides
50. Helminths related childhood paraplegia would most likely occur in
- Taeniasis
 - Schistosomiasis
 - Trichinosis
 - Ascariasis
 - Echinococcosis

51. Concerning Cysticercosis

- a. It is caused by *Taenia solium* and not *Taenia saginata*
- b. Infection is caused by eating beef rather than pork meat
- c. Epilepsy is the most frequent presentation
- d. Brain calcification is easily distinguished from Tuberculoma on CT.
- e. Praziquantel 25mg/kg 2hourly for 24 hours is effective in reducing the number and size of cysts.

52. The following are correct about Hydatid disease

- a. Dogs are the main source of infection
- b. Is generally symptomless and discovery is accidental
- c. Lung rather than the liver is the predominant site for cyst
- d. Cyst of < 5cm can be surgically removed without any risk
- e. Praziquantel and Albendazole have not proved successful in the treatment of inoperable cysts

53. In paragonimus disease

- a. Haemoptysis or coffee brown sputum is the first symptom
- b. Constitutional symptoms are generally present
- c. Streaky shadows and cavitation on chest x-ray distinguish it from pulmonary Tuberculosis
- d. Both sputum and faeces are used in the diagnosis
- e. A skin test valuable in both clinical and epidemiological surveys exists