

5 Opportunistic infections and coinfections

Answers

1. What are protozoa? Name 3 protozoa that cause gastric infections.

Protozoa are tiny parasites. Giardia, cryptosporidia, and microsporidia.

2. At what CD4 count are you at greater risk for gastric infections?

A CD4 count below 300 cells/mm³ increases the risk of gastric infections.

3. Name 3 ways to minimise the risk of gastric infections?

- Drink bottled water sourced from underground sources
- Wash vegetables and salads thoroughly
- Cook meat thoroughly

4. What is candida?

Candida (thrush) is a fungal yeast infection that commonly affects the mouth and throat, gullet, sinuses, genital organs, and much more rarely the brain.

5. What are the main symptoms of candida?

Symptoms of candida include white or red patches (especially in the mouth), sometimes cracks at the corners of the mouth, headaches and possible vomiting, difficulty eating, and taste changes.

6. Name 3 anti-fungal medicines.

Ketoconazole, itraconazole and fluconazole.

7. What is PCP?

PCP – pneumocystis jiroveci (new) or pneumocystis carinii (old) – is a fungal infection that causes pneumonia.

8. At what CD4 are you more at risk for PCP?

A CD4 counts below 200 cells/ mm³ increases the risk of PCP.

9. Which drugs are used as prophylaxis for PCP?

Prophylaxis treatment against PCP includes co-trimoxazole, dapsone, aerosolised pentamidine, atovaquone, sulphadiazine plus pyrimethamine.

10. What is first-line treatment for PCP?

First line PCP treatment is co-trimoxazole by continuous drip or injection for 3-4 days and then switch to tablets.

11. What other treatments can be used for PCP?

Alternative PCP treatments include trimethoprim plus dapsone, pentamidine, trimetrexate, atovaquone and clindamycin plus primaquine.

12. What is TB?

TB – tuberculosis – is a bacterial infection that commonly affects the lungs but can also affect other organs.

13. What is the difference between active and inactive TB?

Active TB is infectious, while inactive TB is not.

14. What is the first-line treatment for TB?

A 2-month course of a combination of 4 antibiotics (isoniazid, rifampicin, pyrazinamide and ethambutol), followed by a 4-month course of a combination of 2 antibiotics (isoniazid and ethambutol).

15. Which ARVs should not be taken with rifampicin?

Any PI or nevirapine.

16. When is TB prophylaxis recommended?

TB prophylaxis is recommended for people who share the same confined living or working place as someone with active TB.

The whole family will often receive treatment if someone in the household has active TB.

17. What is MAI (or MAC)?

A bacterial infection that causes fever, night sweats, weight loss and weakness. MAI can cause diarrhoea and abdominal pain because of ulcers and swollen lymph nodes, liver and spleen. MAI can cause anaemia and low platelets.

Mycobacterium avium and Mycobacterium intracellulare, two bacterial organisms closely related to Mycobacterium tuberculosis which causes TB. Illness from these bacteria is called MAI in Europe and MAC in the US, but they are the same.

18. What treatment is recommended for MAI (or MAC)?

A combination of two or more antibiotics, usually clarithromycin or azithromycin plus ethambutol.

19. What is hepatitis?

Hepatitis is an infection that causes liver inflammation or damage.

20. How long does hepatitis C take to cause liver damage in HIV-negative people?

Approximately 20-25 years in HIV-negative people. This can happen more quickly in people coinfected with HIV.

21. What is the treatment for hepatitis B?

Drugs that are active against hepatitis B include adefovir, 3TC, tenofovir and FTC. In HIV-positive people with hepatitis B coinfection, 3TC, tenofovir and FTC should only be used in a 3 drug ARV combination because of the risk of HIV resistance.

22. Below what CD4 count does the risk of CMV increase dramatically?

CMV is a threat when CD4 count drop below 50 cells/mm³.

23. How is CMV diagnosed?

CMV retinitis is diagnosed by eye examination. CMV in other organs is diagnosed by tests on a sample from the affected part of the body.

Anyone with a CD4 count below 50 whether on or off treatment should have monthly eye checks.

24. How is toxoplasmosis transmitted?

Toxoplasmosis is transmitted by eating raw or undercooked meat. Exposure to cat faeces is also a source of infection.

25. For how long does toxoplasmosis need to be treated?

Toxoplasmosis treatment continues until CD4 rises above 200.

26. What are the main AIDS-defining cancers?

These include Kaposi's sarcoma (KS), Non-Hodgkins lymphoma (NHL), Hodgkins disease (HD) and cervical cancer.

27. Do cancers improve with ARV treatment?

Apart from KS, HIV-related cancers are the one type of illnesses that do not dramatically improve and resolve as a response to ARV therapy.

28. What cancer is associated with hepatitis C?

Liver cancer is associated with hepatitis C.

29. What is wasting?

Wasting is loss of lean muscle mass. It is a symptom of HIV infection itself and OIs that results in weight loss.