



Health Concerns

MAC

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What is MAC?

- MAC stands for Mycobacterium Avium Complex. It is a bacteria that is closely related to the germs that cause tuberculosis (TB). However, it is not transmitted in the same way as TB. TB can be passed on from one person to another through close contact and coughing, but MAC cannot.

How does one get MAC?

- The germ MAC are found in soil and water. Most people have already been exposed to it. In people with healthy immune systems, it usually does not cause illness. In people with HIV whose CD4 count is below 100, MAC can cause serious illness.

What are the symptoms of MAC?

- The symptoms of MAC can include fever, chills, weight loss, night sweats, watery diarrhea, abdominal pain, weakness and fatigue. It can also cause anemia (a decrease of the red blood cells in your body).
- MAC is a slow developing bacteria so the symptoms may be mild at first and gradually get worse over weeks and months.
- MAC can be diagnosed by a blood test. If your CD4 count is below 100, your doctor should do blood test for you to check for this infection.

How can MAC be prevented?

- Since MAC only cause illness in people with very weak immune systems (CD4 count below 100), the best way to prevent it is to stay healthy and keep your CD4 cells at a higher level.
- Anti-HIV medications can help you maintain the health of your immune system and keep your CD4 count high.
- If your CD4 counts are below 100, you can take medications to prevent MAC. Common medications that are used to prevent MAC include:
 - azithromycin (Zithromax) 1200 mg once a week by mouth
 - clarithromycin (Biaxin) 500 mg twice a day by mouth
 - rifabutin (Mycobutin) 300 mg once a day by mouth

How can MAC be treated?

- MAC is a difficult germ to treat and can become resistant to effects of one medication alone, so usually combination of several medications together is needed when you have MAC.
- The common medications that are used in combination to treat MAC include:



- clarithromycin (Biaxin)
 - azithromycin (Zithromax)
 - rifabutin (Mycobutin)
 - ciprofloxacin (Cipro)
 - ethambutol (Myambutol)
- The choice of which drugs to use will depend on your overall health, your symptoms, which drugs you are allergic to, other HIV medications that you are taking and other factors.
 - The medications usually do not kill the MAC bacteria completely, so treatments often need to continue for life.
 - With the recent advance in HIV treatments, some people have major improvements in their CD4 counts. When your CD4 counts rise above 100 and stay above 100 for a few months, you may be able to stop treatments for MAC. Talk with your doctor about this possibility.

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