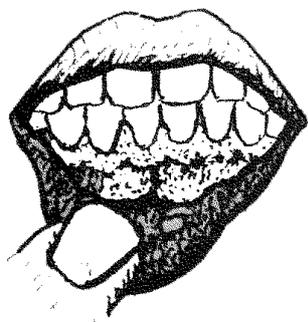


meal. Use a soft toothbrush and some toothpaste. You do not need a lot of toothpaste. A drop the size of a lentil once a day is enough. Reduce sweets and fizzy drinks like Coca-Cola - they cause teeth to rot. Children should rather be given nuts or fruit as special treats. Once you have a toothache or notice a hole in a tooth visit a dental clinic.

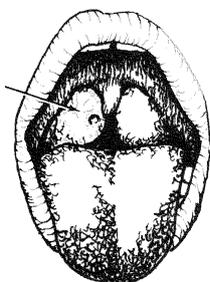
Sores in the mouth



It is common to get sores in the mouth. Brush your teeth regularly to try and prevent this. It helps to use a mouthwash and to put some cream onto the sores. A Chlorhexidine or Povidone-iodine mouthwash is good. Teejel[®] and Bonjela[®] are available at most clinics. Kenalog in Orabase[®] might be slightly better as it contains steroids. This is not available at clinics. However, clinics should have steroids in the form of asthma pumps. This can be

sprayed directly onto the sores, rather than being breathed in. If steroids make the sores worse it means they are caused by the herpes virus. If this happens, stop the steroids and use Acyclovir tablets. If you also have cold sores on the lips start with Acyclovir straight away. Acyclovir is not available at most clinics. If the sores are infected with bacteria or your gums are very swollen it might be necessary to gargle with Doxycycline tablets or swallow Metronidazole tablets.

Painful throat



Many people complain of a painful throat. Often people think this is caused by oesophageal thrush. However, oesophageal thrush causes chest pain, not throat pain. Consult a nurse or doctor. It might be tonsillitis for which you need Amoxicillin tablets. It might also be an irritation that will go away if you gargle with salt water and drink Paracetamol tablets.



Pain or pus from the ears

Pain or pus in the ears usually means you have an infection of the inner ear. This can be treated with Amoxicillin and Paracetamol tablets. To clean your ears rather use rolled up toilet paper than ear buds or matches. Hard things can damage the inside of the ear. Eardrops can also help to dry up pus in the ear. If the problem continues, the doctor should send a specimen to the laboratory to find out which type of bacteria is causing the problems, whether to use different antibiotics or whether it is not TB.



Coughing is a very common problem

People living with HIV very often experience a cough. Sometimes medicines are needed. Sometimes a cough can disappear on its own. There are different causes for coughing. Each one needs different treatment. Most clinics do not have cough mixture, as this does not help the cough go away faster. Sometimes it is necessary to refer a person with a cough to a hospital.

Hay Fever

Some people cough more in spring. Their cough is worse when it is windy. Dust from tree flowers (pollen) or grass-seeds in the air makes it worse. The cough comes with itchy, red eyes, and an irritated throat. This is called hay fever. The clinic can provide anti-histamine medicines.

Smokers

Some people cough, because they are smokers. Some people living with HIV say they will die anyway so they can carry on smoking. However, smokers get more chest infections and this makes the HIV worse. Smokers should be encouraged to stop.

Common cold or flu

Most people get a cold during the winter months. This comes with a runny nose. If you also have a fever it is flu. Cold and flu are spread by viruses. The cold virus is spread by contact with the watery snot from someone's nose. The flu virus is spread by coughing. Both usually last for a week. For a cough caused by cold or flu it is not necessary to get medicines from the clinic. A steaming rooibos tea and Paracetamol tablets will be sufficient.



Bronchitis

If the cough stays longer, if a pain spreads down into your chest and if you cough up yellow or green slimes, your air pipes have been infected with bacteria. This is called bronchitis. Antibiotic medicines from the clinic will help. Usually Amoxycillin is used.



Pneumonia

If the cough is so bad that you get short of breath or cough up blood, feel very hot and cold, and you have a pain like a knife stabbing in your chest, the infection has gone into the meat of the lungs. This is called pneumonia. Treatment at the clinic will not be enough. You need to lie in hospital and get antibiotic treatment with a drip. Pneumonia is classified as HIV stage three.

Pneumocystis Carinii Pneumonia (PCP)

People living with HIV sometimes get a different kind of pneumonia called PCP. With PCP the dry cough comes slower and you feel short of breath the whole time. PCP can only attack the body when the immune system is weak. PCP is classified as HIV stage four. The doctors can measure how strong your immune system is by doing a blood test called a CD4 count. If your CD4 count is below 200 your immune system needs support to fight diseases. Take the antibiotic Cotrimoxazole (also called Bactrim or Septran) to prevent PCP and other infections. You should also take Cotrimoxazole if you have HIV stage three or four.

Finish an antibiotics course

Whenever you get antibiotic medicine it is important to take them as prescribed and to finish them all. If you feel better after a few days, you must still finish them. If the tablets make you feel bad tell the nurse or doctor about it, but do not just stop taking these medicines. Also tell the doctor or nurse if you have had problems like skin rashes or fainting with antibiotic medicines before.



Persistent cough and TB

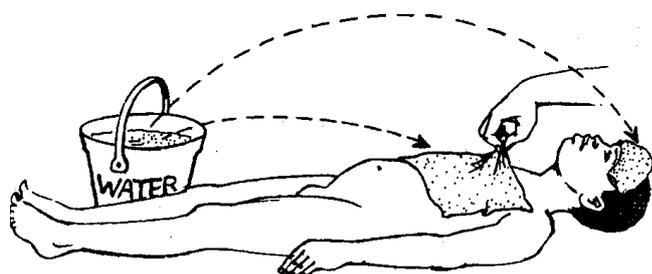
If the cough does not go away with treatment you should go back to the nurse or doctor. This might mean that you need stronger tablets or that you have TB. With TB you might also lose weight and get night sweats. If TB is diagnosed early it can be treated fully.



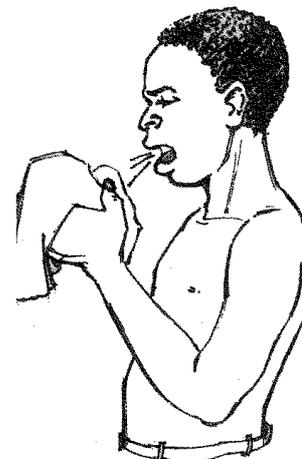
If your HIV illness is in stage 3 or 4 take Cotrimoxazole medicines to prevent PCP pneumonia.

What does it feel like?

TB can make you sick in different ways. TB usually makes you cough for weeks. The cough is often worse at night and sometimes makes you vomit. TB also makes you lose weight suddenly. Often you do not feel like eating anything. TB often causes a temperature. This means you will feel very cold and very hot independent of the room temperature. It does not help if you put on warm clothes and lie under thick blankets. Lie down with wet towels over you. This cools down the body and stops the shivering. Also take Paracetamol medicines. TB can



also make you sweat at night. You might have to change your linen at night because they are wet from sweating. TB can make you feel very tired. These symptoms are common in all forms of TB.



What is it medically?

TB is an infection by a germ called mycobacterium tuberculosis. If a person with TB coughs, thousands of these germs are left floating in the air. You can breathe these germs into your lungs. The lymph nodes of your lungs will try to hold the TB germs and keep them in a “sleeping” form. This way the TB germs can stay in your body for years without making you sick.



The lymph nodes are part of your immune system. If the immune system gets weakened the TB germs can become active and cause TB disease. HIV, poor nutrition, alcoholism or a combination of causes can weaken the immune system. The active TB germs usually

attack the lungs and make you cough. In this way the TB germs will get spread to other people again. It can also enter the blood and cause illness in any other body part. Diagnosis of TB is more difficult when it is in other body parts. However, it will not infect others if it is not coughed up. If not treated correctly, TB can be life threatening.



Who gets TB?

More than 95% of all people in South Africa carry inactive “sleeping” TB germs. However, not everyone who carries the germs will get the TB disease. HIV positive people are especially at risk. Every year an HIV positive person has a 10% (one in ten) chance that the “sleeping” germs will cause TB disease. HIV negative people’s chances are smaller (10% over their whole lifetime). Compared to HIV-negative patients with TB, HIV-positive people with the disease may see their symptoms develop faster and with greater intensity. Many people living with HIV also get TB for a second and third time. The lower your CD4 count, the higher the chances of getting sick with TB. A weak immune system also makes it more likely that the TB will affect other body parts apart from the lungs.

More women than men get TB. Children can also get TB. The immunisation that children get does not prevent TB altogether. It helps to reduce the chance of the child getting the more serious forms of TB.

Making the diagnosis of TB

Often doctors and nurses can suspect TB when a patient complains about associated symptoms such as weight loss or high temperature. It is good to make a definite diagnosis of TB before starting with treatment.

TB of the lungs is called pulmonary TB or PTB

The diagnosis of TB of the lungs is made by looking at the sputum under a microscope. You cough up some sputum from the bottom of your chest and put it into a little jar. This sample is then sent to a laboratory. The laboratory uses a microscope to look for the bacteria. This process is called direct TB microscopy and it will take about a week before the result comes back. If TB germs are seen with the microscope the person is “sputum positive” or “direct positive”. This means you have active TB in your lungs and that you need treatment.

Problems with direct TB microscopy

Direct TB microscopy can only diagnose TB of the lungs. It cannot diagnose TB in other body parts. People living with HIV often test negative with direct TB microscopy, even if they have TB of the lungs.

TB culture

A more sensitive test called TB culture can be done. It is more expensive – it costs the clinic about R50, compared to R20 for a direct microscopy. It can take a month before the result of the TB culture is known. The National TB Protocol says TB cultures should only be done for people who have had TB before.



This protocol should be changed in the light of the fact that HIV positive people who have TB test negative with direct TB microscopy.

TB in children

Where there is already TB in a family, children can be diagnosed, especially if they show symptoms such as weight loss and temperature. Since children swallow sputum after coughing, a tube is sometimes pushed through the nose into the stomach. Some fluid is sucked from the stomach and this is tested for TB germs by microscopy and culture. This tests for TB of the lungs. A skin test can also be done.



Staging of HIV

TB can occur at any stage of HIV disease. Once you have TB of the lungs (PTB) the HIV will be classified as stage 3. All other forms of TB (extra-pulmonary TB) are classified stage four. Even after the TB has been cured and you feel completely healthy you remain stage four.

Treatments for TB

TB treatment is difficult, but TB can be cured. TB is always treated using a combination of drugs. You will find a great improvement of your health in the first two months of TB treatment. Your appetite should be back and you should gain some weight. However, you must complete the full TB course to make sure the germs are all killed.

First time treatment

If you are being treated for tuberculosis for the first time – that is, you have not had tuberculosis before – you will need to take four drugs for two months, followed by a combination of two drugs for another four months. In the first two months you will take Rifampicin, INH, PZA and Ethambutol. These come in the combination of Rifafour or Myrin Plus. The last four months you will take Rifampicin and INH. In other words, you will need to take medicines for six months in order to cure the tuberculosis.

Second time treatment

If you've had tuberculosis before, you will receive five drugs to take for two months, Rifampicin, INH, PZA, Ethambutol as well as Streptomycin injections. In the third month, you will continue with four drugs, Rifampicin, INH, PZA and Ethambutol. After that, you'll take two drugs for another five months, Rifampicin, and INH. In other words, you will need to take medicines for eight months in order to cure the tuberculosis.



Side effects of treatment

TB medicines can cause side effects. These include loss of appetite, stomach pains, nausea, vomiting, dark orange urine, joint pains, burning sensations in the feet (peripheral neuropathy), skin itching, rash, altered vision (strange colour changes), liver problems and difficulty hearing. If you have bad symptoms, these should be treated as well.

Additional medication

- Apart from the TB medications, you should also take Cotrimoxazole, which will prevent you from getting PCP pneumonia on top of the TB. Cotrimoxazole side effects are rash and itchiness.
- Vitamin B Complex is a tonic that can make you feel better.
- Pyridoxine can prevent peripheral neuropathy – one of the side effects the TB medication may cause.
- You might need some tablets to stop vomiting, or some tablets for temperature or pain. You might also need treatments for another opportunistic infection like thrush.

Directly Observed Treatment Shortcourse (DOTS)

The World Health Organisation (WHO) promotes a TB treatment program called DOTS. Our National TB Program is based on the WHO approach. According to this program all countries should make TB treatments readily available to all patients who have active TB.

Also, patients should be observed when taking their treatments. A nurse, community health worker or family member watch you take your pills. Since you will need to take several drugs, sometimes five times a week and sometimes three times a week, treating TB can be confusing. Having someone help you take these pills is the best way to ensure that you take every dose for the full duration of your TB treatment. The needs of the patient should come first. This approach should be patient centred, with putting the patient's needs first. Health workers should listen to you and explain things to you. They should be friendly, courteous and encouraging.

TB and HIV

In South Africa nurses and doctors treat patients with TB according to a National TB Protocol. This is a guideline to ensure good TB treatment in all clinics. Health workers should treat these guidelines as a **minimum standard** of care patients should receive. You might need **more care** if you have both HIV and TB. Many problems of the present DOTS system could be overcome if nurses received HIV specific training.

