Diagnosis

Usually diagnosis is made on the basis of one or more of the following tests: recovery of the cocci organisms from sputum (phlegm) or some other body fluid or by blood tests that reflect the body’s reaction to the presence of the fungus. In some cases a biopsy may be needed.

These tests are quite reliable, but they may fluctuate according to the stage of the disease. The tests are not positive in every case of cocci. In some instances, the diagnosis may rest on circumstantial evidence, particularly for people living in an area of the Southwest where much cocci is found. In most cases, however; these tests are helpful.

Chest X-rays reveal some of the abnormalities associated with cocci, but the shadows may be a mistake for those of tuberculosis or some other lung disease.

Treatment

Patients suffering from the flu-like symptoms of cocci in its primary form will probably be sent to bed by the doctor. Symptoms, such as cough and fever, will be treated.

For the disseminated form of the disease, a number of drugs are now available.

Occasionally surgery is recommended to remove a diseased portion of the lung, bone or skin.

The Future

There are many mysteries—yet unraveled—about cocci.

Better methods both to prevent and treat the disease remain to be found.

Simple avoidance of infected areas is probably best for newcomers among black, Mexican and Filipino adults. Those who have lived there since childhood may well have developed a kind of immunity to the disease that newcomers do not have.

Methods for the control and sterilization of dust are being studied and improved.

Some research, including work on a vaccine, is now being done on ways to make people immune to cocci.

For more information please call
(661) 321-3000
kernpublichealth.com

More information can be obtained by visiting
Valley Fever Americas Foundation
http://valleyfever.com/

Adapted from the Valley Fever Center for Excellence
Coccidioidomycosis website www.vfce.arizona.edu
What is Valley Fever?

The technical name for Valley Fever is Coccidioidomycosis, or “coccii” for short. It is caused by Coccidioides immitis, a fungus somewhat like yeast or mildew which lives in the soil in the southwestern United States and northwestern Mexico. The tiny seeds, or spores, become wind-borne and are inhaled into the lungs, where the infection starts. About 60 percent of the people who breathe in the spores do not get sick at all. For some, it may feel like a cold or flu. For those sick enough to go to the doctor, it can be serious, with pneumonia-like symptoms that require medication and bed rest. Of all the people infected with coccii, about one out of 200 will develop the disseminated form, which is devastating and can be fatal. These are cases in which the disease spreads beyond the lungs through the blood stream—typically to the skin, bones, and the membranes surrounding the brain, causing meningitis. Coccii is not contagious from person to person. It appears that after one exposure, the body develops immunity.

Who Gets Valley Fever?

The disease may occur in any resident of the infected areas—or a visitor; often offering a diagnostic puzzle to the doctor back home. People most likely to be exposed are those in dusty occupations, such as farm workers, earth movers and archaeologists. However, the more serious or disseminated form of coccii is many times more frequent in non-white people, and those with impaired immune systems. Persons between the ages of 25 and 55 are most likely to develop symptoms of the disease—although people of all ages can have symptoms. In its simple form, with the flu-like symptoms, coccii affects both men and women equally. But the serious form of the disease is found more often in men than in nonpregnant women. Pregnant women seem to be more susceptible to the serious form.

How the Spores Affect the Body

Floating freely in clouds of dust, the tiny coccii spores enter the body when we breathe air into our lungs.

Most never get anywhere. The body’s wonderful defense system works too well: the spores get caught in sticky mucus inside the air tubes and are moved back up into the throat where they are either spit out or swallowed harmlessly.

But a few coccii spores do continue the invasion. They work their way down the air tubes to the end of the passage: the little air sacs of the lung, where the air ends up when it is inhaled.

Deep in the lung, the spores begin to grow. They develop into pods that are filled with even tinier seeds. The pods burst open, the seeds pour out and spread in the lung and sometimes to other parts of the body.

Wherever the spores settle down, the body reacts with inflammation. In the lungs, little patches of pneumonia develop around the spores. Cavities or scars may result, and eventually deposits of calcium.

When the spores stay in the lungs, the disease is said to be in its primary form. When the fungus spreads throughout the body—to the internal organs, bones, brain, and even the skin—coccii is in its disseminated form.

Symptoms

Perhaps as many as 60 to 70 percent of all people infected with coccii develop no symptoms at all. Some 30 to 40 percent do get sick—usually within one to three weeks after the coccii spores invade the body. Fever may go as high as 104 degrees. There are usually aches and pains and a cough. A week or two after the fever develops, some patients get a rash that resembles the measles. There may also be tender red spots on the shins and pain in the joints. Usually symptoms disappear within a month or so, though full return of energy may take some months.

The disseminated form of the disease is a great deal more serious—with very high fever and extreme fatigue. It has been estimated that about one percent of white patients develops the disseminated form of the disease. However in ten to twenty percent of dark-skinned patients, coccii progresses to its disseminated form, which can be fatal.

It is wise always to check with a doctor—because only he or she can tell.