



ASK DR. BOB . . .

with Dr. Bob Frank

Sarcoidosis

A question often asked by agents or underwriters is “can we insure someone with sarcoid who is still taking steroids?” Although many individuals think of lung involvement when they think of sarcoid, it can affect many other organ systems in our body. Liver inflammation is common, although it seldom causes symptoms. Sarcoid often causes enlargement of lymph nodes throughout the body. It can affect the vision, causing inflammation of the anterior portion of the eye or the optic nerve. It often affects the skin, especially an entity called erythema nodosum in which slightly painful red tender nodules appear on the skin. Elevated calcium levels may be present. Although uncommon, it can also affect the heart and nervous system, and disease here often can result in more serious long-term complications. In the heart it can cause bundle branch block and heart failure. In the nervous system it can cause cranial nerve and peripheral neuropathies, which may give a stroke-like picture. In the lungs, which are involved in greater than 90% of

cases, it causes an interstitial lung disease. By interstitial, it is meant the elastic supporting structure of the lungs is stiff and fibrotic, causing difficulty in inflation of the lungs and the exchange of oxygen. It is similar to the type of lung disease seen in coal miners and idiopathic pulmonary fibrosis.

In the lungs, chest x-rays or CT scans show inflammation of the interstitial tissue, and often there is enlargement of the pulmonary lymph nodes. Pulmonary function tests are often abnormal. At times the diagnosis can be difficult, and may require a biopsy of the lung, the liver, or one of the enlarged lymph nodes. Typical changes consist of non-caseating granulomas, although these changes are not completely specific for sarcoid.

The cause of sarcoid is unknown, but it is accepted that there develops an exaggerated immune response to some type of unknown antigenic stimulus in a genetically susceptible person. African-Americans are affected 10 times more commonly than Caucasians, and usually the onset is between the ages 20-40 year old.

As noted, the lungs are most commonly involved and the individual presents with cough and shortness of breath. Lung disease is divided into five stages. In stage 0, there is no visible lung involvement on x-ray, although biopsy is often abnormal. In stage 1 there is enlarged lymph nodes alone. In stage 2 there is enlarged lymph nodes plus diffuse inflammation throughout the lung tissue. In stage 3 there is diffuse lung inflammation without enlarged lymph nodes,

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and in Stage 4 there is advanced lung fibrosis from chronic inflammation. The stage at the time of presentation and diagnosis does have prognostic information. Stage 1 individuals often are asymptomatic, and their disease may be diagnosed when a routine chest x-ray shows enlarged lymph nodes. In these cases, pulmonary function tests are usually normal. In stage 1, 85% of individuals have remission of their disease within two years, and less than 5% go on to develop progressive disease. There is one particular subset of sarcoid referred to as Lofgren's Syndrome, which is characterized by enlarged lymph nodes, fever, muscle and joint aching, and the skin rash erythema nodosum, who have an excellent recovery. In stage 2 disease, only 50% have remission of the disease within two years, with a 15% progression rate to more severe disease. Stage 3 is not very common at time of presentation, with only a 30% remission rate, 60% remain stable, and 10% progress. In stage 4, they are already seriously ill and very seldom is remission noted.

The standard of treatment is steroids, which does alleviate the current symptoms and gives improvement in the enlarged nodes. However, despite the widespread use of steroids, there is no conclusive proof that they influence long-term prognosis or have a beneficial effect in preventing progression of disease. Often in stage 1, only simple analgesics are used. Steroids are usually reserved for stage 2 and 3 disease. Other immunosuppressives are used in cases that are resistant to steroids. The usual plan of treatment is to give the medication for approximately 1 year, and then gradually taper the dose over 6 months, waiting to see if there is a relapse. Relapses are not uncommon.

The long-term prognosis depends on the distribution and severity of the organ involvement at the time of presentation as well as the stage of the pulmonary disease. In underwriting, the underwriter must determine whether the disease is still active or in remission. Is there any evidence of permanent damage to the various organ systems? Pulmonary function tests can usually determine whether or not this has occurred in the lungs. Patients with serious cardiac or neurological involvement have the worst prognosis, and the majority of deaths are related to cardiac disease. If one looks at the overall prognosis of all comers, there is only a slight increase in mortality compared to expected. The longer one goes after they have been in remission, the more likely they are going to stay in remission. There are individuals who tend to have relapses frequently. Looking at the results of current pulmonary function tests is important to determine the extent of lung damage.

So you can see, sarcoid is really not a serious disease from the standpoint of life underwriting. It may be slightly more ominous from the standpoint of disability underwriting. The vast majority of individuals have the disease for a period of time, respond to treatment, and have remission of their disease. At this time most of them would be standard issue, and would even qualify to be profiled as a preferred case. It is much more difficult to underwrite a case of sarcoid if the diagnosis was recent or the person is still on treatment.

I would be happy to answer any questions you have about sarcoid or any other medical matter that you wish to discuss.