Takayasu's arteritis, also called TAK, is a rare form of vasculitis disease involving inflammation in the walls of the largest arteries in the body: the aorta and its main branches. The disease results from an attack by the body's own immune system, causing inflammation in the walls of arteries. The inflammation leads to narrowing of the arteries, and this can reduce blood flow to many parts of the body.

Takayasu's arteritis can result in a weak pulse or loss of pulse in arms, legs and organs. For this reason, people used to refer to the illness as “pulseless disease.” Sometimes patients with TAK may have no symptoms, and the disease is so rare that doctors may not easily recognize it. Thus, there is often a delay in detecting it, sometimes several years.

Doctors most often find TAK on an angiogram, a test that shows how well blood flows in arteries. A doctor often orders an angiogram when a patient has symptoms and abnormal results of the physical exam. These include loss of pulse or low blood pressure in an arm, or abnormal sounds (“bruits”) heard over large arteries with a stethoscope.

Large arteries can also become inflamed in a few other diseases. Examples include other types of vasculitis: giant cell arteritis (a disease of older adults), relapsing polychondritis, Cogan's syndrome and Behçet's disease. Some infections can also cause inflammation in large arteries.

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TAK most often needs treatment to prevent further narrowing of affected arteries. Yet, the narrowing that has already occurred often does not improve, even with drug treatment. Glucocorticoids (prednisone, prednisolone or others), often referred to as “steroids,” are an important part of treatment. The dose and length of treatment depend on how bad the disease is and how long the patient has had it. However, these drugs can have long-term side effects.

Doctors sometimes prescribe immune-suppressing drugs because their side effects may be less serious than those of glucocorticoids. This is called “steroid-sparing” treatment. These medicines include methotrexate, azathioprine, mycophenolate mofetil, cyclophosphamide, drugs that block tumor necrosis factor (such as etanercept, adalimumab or infliximab) and other biologics like Tocilizumab. Doctors frequently prescribe these drugs to treat other rheumatic diseases, but they also use them to treat TAK. There is not enough proof that these drugs are definitely effective in treating TAK. Research studies are ongoing to find new drugs to treat TAK.

Some experts advise routine use of low-dose aspirin. The thought is that it will help prevent blood clots from forming in damaged arteries. Therapy for TAK also includes screening for high blood pressure and high cholesterol, and treatment if these problems are present.

TAK is a chronic disease and may need long-term treatment. Some patients have no symptoms or only mild symptoms, but others are disabled or need surgery more than once. Side effects from medicines, mainly glucocorticoids, can be troubling. Patients taking immunosuppressants are at risk of infections.

Because TAK can cause heart problems, high blood pressure and stroke, patients with TAK should talk to their doctor about ways to lower the risk of these serious problems. Blood pressure measurement is often not correct (falsely low due to blocked arteries) in the arm. So, your health care provider may need to measure your blood pressure in a leg.

The disease can recur after treatment or can silently get worse. It is often very hard to know whether TAK is active again. Thus, most patients need frequent doctor visits and angiograms.

More information about Takayasu's arteritis can be found on the Vasculitis Foundation's website at www.vasculitisfoundation.org.