

The heart can be affected by sarcoidosis in two ways. Firstly, sarcoidosis can occur in the heart muscle itself (cardiac sarcoidosis). Secondly, the heart may be indirectly affected as a result of sarcoidosis in the lung (pulmonary hypertension).

Pulmonary hypertension

Pulmonary sarcoidosis (sarcoidosis of the lung) can also indirectly affect heart function. Abnormalities of the lung, and of the blood vessels between the lung and the heart, can cause an increase in the pressure within the blood vessels in the lungs. This pressure can then overload the right ventricle. This can occur in up to 15% of all patients with sarcoidosis.

Treatment:

Medications can reduce symptoms and improve the pressures in the blood vessels.

You may be prescribed:

- diuretics
- endothelin antagonists
- prostacyclins

Lung transplant may be considered (very rare).



Cardiac sarcoidosis

The accumulation of immune cells causes clumps of tissue (granulomas) which can occur in the heart in different places:

- the heart muscle of the left or right ventricles and interventricular septum;
- the papillary muscles (connected to the heart valves);
- the pericardium (thin sac lining the heart);
- and (less often) the left or right atrium

Granulomas can also occur in the electrical conduction system of the heart (which normally helps regulate your heartbeat). Cardiac sarcoidosis occurs in up to a third of all sarcoidosis patients but only causes specific symptoms in around 5% of cases.

Symptoms:

- irregular heartbeat
- dizziness and/or fainting spells
- shortness of breath
- chest pain
- swelling of the legs (in later stages)

Treatment:

Timely diagnosis and treatment with medication is important for a favourable prognosis.

You may be prescribed:

- specific heart medications (tablets)
- implant a pacemaker or defibrillator (ICD)

Heart transplant may be considered (very rare).

Techniques to understand your condition

Most newly diagnosed sarcoidosis patients will have an ECG, holter monitor and echocardiogram. Suspected cardiac sarcoidosis patients may go on to have further diagnostic tests.

Diagnostic tests:

- ECG (electrocardiogram)
- Holter monitor
- echocardiogram
- MRI (Magnetic Resonance Imaging)
- nuclear scans
- clinical electrophysiology studies
- RHC (right heart catheterisation)
- biopsy of the Heart
- blood Tests

General sarcoidosis treatment

Your doctor may prescribe medication to suppress the sarcoidosis:

- corticosteroids in tablet form, usually prednisolone. These medications must be used for a number of years, or even permanently.
- other medicines that suppress the immune system, for example methotrexate, mycophenolate or azathioprine. These drugs suppress the inflammation but do not medicate the heart itself.