

## Carcinoid Heart Disease

Some NETs secrete the hormone serotonin. This can affect the heart by causing thick 'plaques' within the heart muscle. The valves on the right side of the heart are also affected and may become 'leaky', causing symptoms such as breathlessness, fatigue, enlarged liver and swollen ankles.

Up to one in five patients with carcinoid syndrome have carcinoid heart disease and may eventually develop heart failure.

Whilst carcinoid heart disease cannot be reversed, treatment can prevent further deterioration. This usually consists of treatments to decrease hormone production (SSAs, liver-directed therapy, or even debulking surgery). Patients may be referred to see a cardiologist and there may be medications to help preserve heart function.

Ultimately, some patients with carcinoid heart disease may be advised to have heart surgery to replace the leaking valves. As the above treatments are more effective in treating early carcinoid heart disease, and valve damage is irreversible, echocardiography should be considered regularly in NET patients, particularly those with functional NET or known carcinoid heart disease.

## **Carcinoid syndrome**

