Endocarditis

**Infective endocarditis** is an infection of the inner layer of the heart, usually involving the heart valves.

**Causes of Infective Endocarditis**

Infective endocarditis occurs when a bacterial or fungal pathogen enters the blood and attaches to the inner lining of the heart (the **endocardium**), usually a heart valve. The organisms that cause the infection can enter blood through the gums or intestines; by health care–related procedures such as intravenous catheter placement, surgery, or hemodialysis; or through the skin because of intravenous drug abuse. People who have artificial heart valves or congenital heart abnormalities or who have had endocarditis in the past have a high risk of developing endocarditis.

**Symptoms**

Infective endocarditis causes fever in most but not all patients. Other symptoms may be **fatigue** (feeling tired), shortness of breath, swelling of hands or feet, painful lesions on the fingers or toes, and even having a stroke. A doctor might check for a new or worsening heart murmur, heart failure, an enlarged spleen, stroke, or abnormal spots on the hands or feet.

**Diagnosis**

A blood sample may be taken to check for pathogens. An **echocardiogram** (ultrasound of the heart) may be used to detect infection of the heart valves. Sometimes it may be necessary to pass a scope into the esophagus through the mouth to view the heart using an ultrasound device (**transesophageal echocardiography**).

**Treatment**

Infective endocarditis is treated with antibiotics that targeted the bacteria or fungus causing the infection. Patients usually receive a long course of these antibiotics, usually 4 to 6 weeks. Some patients require surgical repair or replacement of the infected heart valve, particularly if mechanical complications in the infected valve cause heart problems.

Poor oral hygiene or gum disease increases the risk of bacteria entering the blood and development of endocarditis. Patients who have a high risk of developing endocarditis should make sure to brush their teeth regularly and get regular dental care. At-risk patients also may need to receive antibiotics before they have any kind of procedure that might cause bacteria to get into the bloodstream.

**FOR MORE INFORMATION**

National Library of Medicine
[https://medlineplus.gov/endocarditis.html](https://medlineplus.gov/endocarditis.html)

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