

# Infective Endocarditis

## What is infective endocarditis?

Infective endocarditis is an infection inside the heart. The infection is in the thin layer of tissue lining the inside of the heart muscle and valves (endocardium).

The infection is caused by organisms (such as bacteria, yeasts, or fungi) that attach themselves to the lining, usually on the heart valves. They grow there, damaging the valves.

## How does it occur?

You are more at risk for endocarditis if you have had endocarditis before or if you have:

- previous heart valve damage from rheumatic fever
- some types of heart problems present from birth
- an abnormal heart valve caused by aging or a breakdown of valve tissue
- artificial heart valves.

The most common ways bacteria can enter the blood are:

- during dental procedures
- from an open wound
- from shared needles during drug use
- during certain surgical and diagnostic procedures.

Endocarditis may occur if you are hospitalized with IV tubes, especially if you need the tubes for more than a day or two.

## What are the symptoms?

The most usual symptoms are:

- persistent fever
- sweats
- chills
- loss of appetite
- tiredness
- weight loss
- joint and muscle pains.

You may also have a heart murmur, which is a sound that occurs between heartbeats.

The symptoms usually get worse over a period of days or weeks. In early stages, the infection may be mistaken for the flu.

### **How is it diagnosed?**

Your healthcare provider will ask about your symptoms and examine you. You may have the following tests to confirm the diagnosis:

- Echocardiography uses ultrasound pictures of your heart structures to detect small areas of infection, called vegetations, attached to the heart valves.
- A transesophageal echocardiogram (TEE) is a special echo picture taken through a small tube passed down your esophagus. This view gives the clearest pictures of the vegetations.
- Blood samples will be tested for infection and to identify the bacteria causing it. The vegetations on the valves give off a shower of bacteria into the bloodstream. However, if you have taken antibiotics during the 2 weeks before the blood test, identification of the bacteria may be delayed or not possible.

### **How is it treated?**

You will have to stay at the hospital for a while. You will take antibiotics for 4 to 6 weeks. You can usually take the last weeks of antibiotic treatment at home.

You may need to have surgery right away if the antibiotics are not able to get rid of the infection or if one of the heart valves is severely damaged.

### **How long do the effects last?**

Successful treatment of the infection may not be enough to restore normal health if a heart valve has been damaged too much. If the valve has been damaged too much, your heart has to work harder and may become enlarged. You may not be able to exercise as much as you used to. If this happens, you may benefit from valve replacement surgery.

If you have an artificial heart valve and get endocarditis, the infected valve must usually be replaced with a new one to be sure of a cure.

If treatment for endocarditis is not successful, you are at risk of a stroke or damage to the kidneys.

### **What can I do to help prevent infective endocarditis?**

Tell your healthcare provider or dentist if you are at risk

for endocarditis. If you are at risk for the disease, take antibiotics before you have dental work or tests to look into your bladder or rectum. Taking antibiotics before the procedures can prevent infection.

Written by Donald L. Warkentin, MD.

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