

## Endocarditis Interventions

Endocarditis is an infection of endocardium affecting the endocardial layer of the heart and cardiac valves (refer to the Picmonic on "Endocarditis Assessment"). Accurately identifying the causative organism is critical to successful treatment of endocarditis. Although completely eliminating the causative agent may take up to 6 weeks and relapses are common, immediate therapy is necessary to prevent further complications. Treatment interventions include IV antibiotics, anticoagulants, and good hygiene.



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### Interventions

#### IV Antibiotics

##### IV ABX-guy

Effective antimicrobial therapy significantly improves outcomes in infective endocarditis. Because accurate identification of the causative organism is essential for targeted treatment, multiple blood cultures should be obtained before initiating antibiotics whenever possible. Patients with fungal endocarditis often require early surgical valve replacement followed by prolonged intravenous antifungal therapy, typically for at least 6 weeks.

#### 4-6 Weeks

##### (4) Fork and (6) Sax

Antibiotic therapy may take 4-6 weeks to completely eradicate the infecting organism. Subsequent blood cultures are collected to determine the effectiveness of therapy.

#### Anticoagulants

##### Ant-tie-clogs

Lesions may break off the endocardium and enter the bloodstream as emboli. Anticoagulant therapy decreases the risk of thrombus formation. Blood stasis found in patients with a low ejection fraction especially benefit from anticoagulant medications.

#### Good Hygiene

##### Clean High-jeans

Good hygiene is critical for preventing infections that may lead to endocarditis. Teach the patient about the importance of daily oral hygiene and regular dental visits to prevent infections. Instruct the patient to avoid people with an infection and to report symptoms of cold, flu, or cough to the healthcare provider.

### Considerations

#### Closely Monitor

##### Monitor Close to Patient

Endocarditis has a high likelihood for recurrent infection and complications. Monitoring the patient is critical to determine the need for additional treatment or medication.

#### Antibiotic Prophylaxis

##### ABX-guy with Purple-axes

Patients diagnosed with endocarditis will receive antibiotic prophylaxis for the remainder of their lives to decrease the risk of bacterial infection. Antibiotics are prescribed before undergoing dental or invasive procedures. Patients with a history of congenital or valvular heart disease will also receive antibiotic prophylaxis to prevent the development of endocarditis.

## **Dental Procedures**

### **Drilling Teeth**

Patients with certain heart conditions undergoing dental procedures require antibiotic prophylaxis to prevent endocarditis. Heart conditions include prosthetic heart valve repair, congenital heart disease, cardiac transplantation, and previous history of infective endocarditis. Dental manipulation may cause the bacteria normally found in the mouth to travel down to the heart and cause endocarditis. Dental work includes manipulation of gums, roots of the teeth, and puncture of the oral mucosa. Dental procedures requiring prophylactic antibiotics include dental extractions, implants, and cleaning (dental hygiene).

## **Invasive Procedures**

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Patients with certain heart conditions undergoing invasive procedures require prophylactic antibiotic therapy to prevent endocarditis. Inform the patient about the importance of antibiotic prophylaxis before invasive procedures, such as catheterization, cystoscopy, endoscopy, and surgery.