

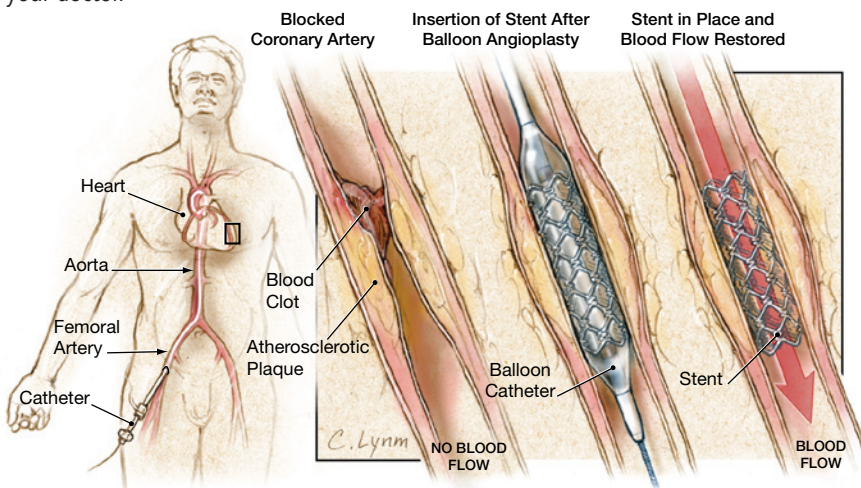
Percutaneous Coronary Intervention

Percutaneous coronary intervention (PCI) is a treatment for persons experiencing **myocardial ischemia** (inadequate blood flow to the heart) or **myocardial infarction** (heart attack). The goal of PCI is to open up a **coronary artery** (blood vessel that brings blood and oxygen to the heart muscle) and restore blood flow. Primary PCI is an emergency treatment performed to reduce the amount of heart muscle permanently damaged by a heart attack. Primary PCI reduces the **mortality** (death) rate from heart attack. The February 11, 2004, issue of *JAMA* includes an article about the use of PCI to treat heart attacks.

PROCEDURES

Percutaneous coronary intervention requires the use of the cardiac catheterization suite with special equipment, x-ray capability, and trained personnel. Usually access to the heart and major blood vessels is obtained through the **femoral artery** in the groin area. The artery is punctured through the skin with a special needle. Under x-ray guidance, a catheter is threaded through the femoral artery up into the **aorta** (large artery from the heart) and then gently advanced into the affected coronary artery. There, a balloon is used to open the coronary artery (**balloon angioplasty**) and restore blood flow. Sometimes a **stent** (a mesh-like metal tube that holds open the artery) is placed at that time to maintain good blood flow through the damaged area.

Percutaneous coronary intervention is not the right treatment for everyone. Your individual treatment options should be discussed with your doctor.



FOR MORE INFORMATION

- American Heart Association
800/242-8721
www.americanheart.org
- National Heart, Lung, and Blood Institute
National Heart Attack Alert Program
301/592-8573
www.nhlbi.nih.gov
- American College of Cardiology
www.acc.org

INFORM YOURSELF

To find this and previous JAMA Patient Pages, go to the Patient Page link on JAMA's Web site at www.jama.com. Many are available in English and Spanish. A Patient Page on heart attack treatments was published in the July 28, 1999, issue; one on women and heart disease was published in the December 25, 2002, issue; and one on risk factors for heart disease was published in the August 20, 2003, issue.

HEART ATTACK WARNING SIGNS

- Chest discomfort
- Feeling of discomfort in the neck, jaw, or arms (especially the left arm)
- Shortness of breath
- Nausea or breaking into a cold sweat
- Feeling faint
- Indigestion—not typical or related to food

If you or someone around you has these warning signs, activate the local emergency medical services response by calling 911 immediately.

Sources: National Heart, Lung, and Blood Institute; American Heart Association; American College of Cardiology

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