

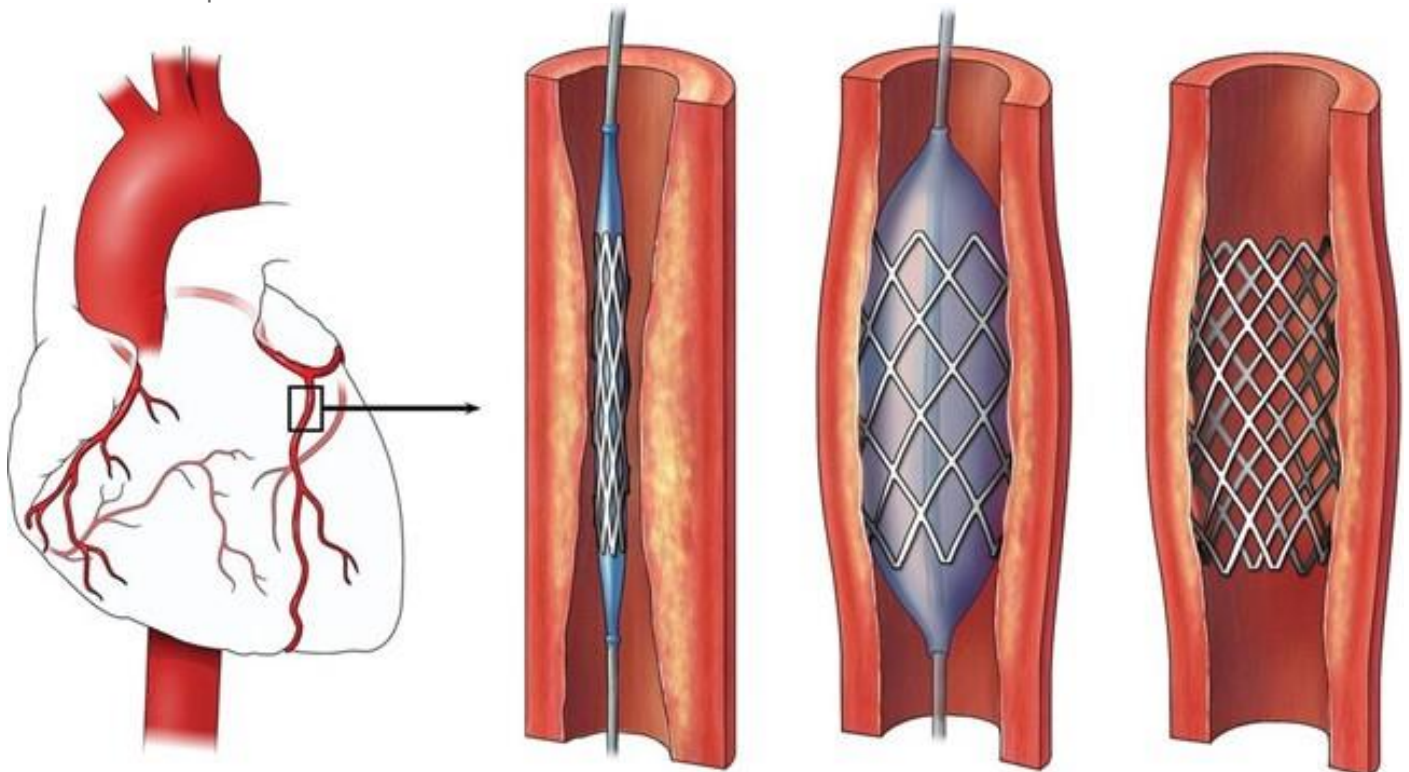
Percutaneous coronary intervention

What is percutaneous coronary intervention (PCI)?

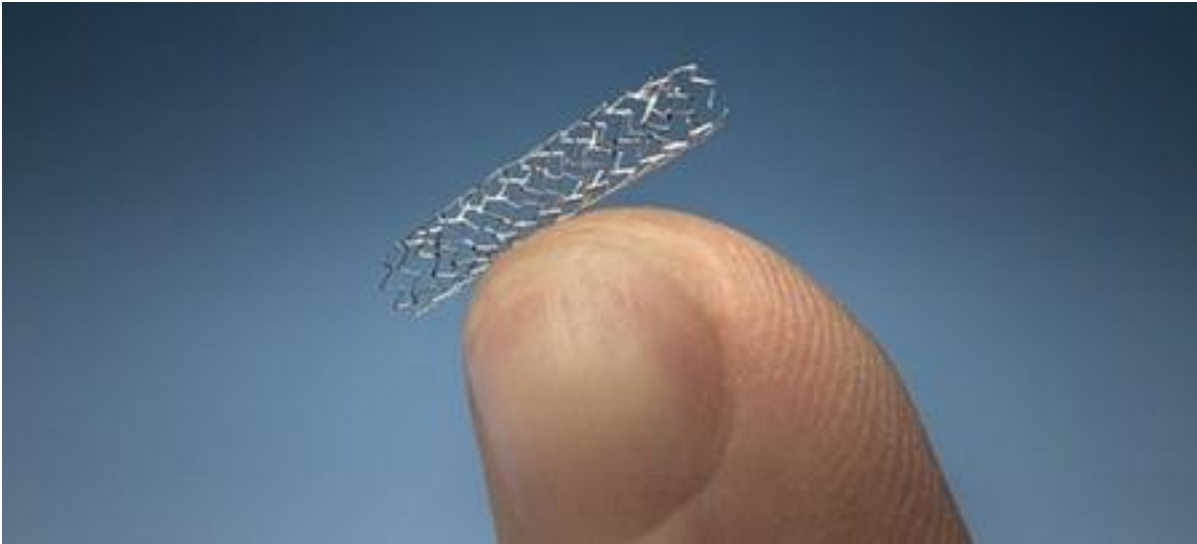
PCI is the process through which treatment is performed on diseased coronary arteries. This is usually done by the placement of stents in the coronary arteries to relieve blockages and narrowing. For this reason, PCI has almost become synonymous with 'stenting' of the coronary arteries.

What is coronary stenting and how is it performed?

Access to the bloodstream is obtained via a needle puncture in your wrist or groin after administering local anesthetic. Then, a narrow tube approximately 3mm in diameter is advanced through the artery in the bloodstream towards your heart and to the coronary artery. Through this, coronary balloons (which unblock occlusions) and coronary stents (which keep the vessel open) can be delivered. The stent acts as a coil that gets delivered to the artery and keeps it open. The stent remains in the vessel, and over time becomes part of the vessel wall.



PCI procedure: A wire is placed in the narrowed coronary artery. The stent is mounted (crimped) on a deflated balloon and then deployed by balloon inflation. After the procedure, the balloon and wire are removed, and the stent will become part of the vessel wall over time.



A close up picture of a coronary stent. Usual stent diameters is between 2.5 – 5.5 mm.

When is PCI required?

Generally, the major indication for PCI is when a patient suffers a heart attack. PCI will then open the blockage and potentially save this patient's life and also prevent reocclusion at this site. A second indication for PCI would be to open stable, but severe arterial narrowing's that cause significant angina which affect the patient's quality of life. Here, the purpose of PCI is to relief symptoms and thereby improving quality of life.

What are the risks involved with PCI?

PCI has evolved over the last decades, and is now considered a very safe procedure. Like with any medical procedure, there are inherently some risks. It is important that the need for an angiogram is carefully considered by your cardiologist. Generally, the risk – benefit ratio favors the procedure, especially if it performed at the time of a heart attack. The main risks of percutaneous coronary intervention includes the following:

- Risk of damaging the blood vessel with instrument passage
- Risk of damaging the coronary artery in the process of treating it.
- Risk of a stroke (0.1-0.3% or 1-3 per 1000 cases)
- Small risk of kidney damage due to the dye used in the procedure – not a relevant concern if your kidney function is normal before the procedure.

How long does the procedure last?

It depends on the complexity of the work being done, but can vary between 10 minutes and 2 hours. The patient remains awake throughout the procedure, and usually does not feel pain during the procedure. An anxiolytic can be provided on request.

Aftercare

Following the procedure, a band will remain on the puncture site in the wrist or a bandage on the groin area (see below) until the bleeding has stopped. You may be admitted to an intensive care unit/ cardiac unit overnight for observation at the discretion of the cardiologist. The recovery period after PCI is very short, and you could return to work in 48hours. If, however you have sustained a heart attack, a longer period of recovery could be expected.

Independent practitioners in association trading as Winelands Cardiology



Suite 21, Block 3 , Vergelegen Mediclinic, Somerset West



021 840 7095



reception@winelandscardiology.com

WINELANDSCARDIOLOGY.COM

Femoral angiogram

Most coronary angiography cases are now being performed via the artery from the wrist. In some patients, this blood vessel cannot be accessed, and then the procedure will have to be done via the artery in your groin. When you sign consent, you agree to any one or both of these sites being used as may be necessary during the procedure. Both your wrist area and your groin area will routinely be prepared and cleaned before any angiogram procedure. Regaining mobility after a femoral angiogram usually takes more time, typically around 6 hours. In this period you will be observed for any bleeding complications at the femoral puncture site.

Independent practitioners in association trading as Winelands Cardiology



Suite 21, Block 3 , Vergelegen Mediclinic, Somerset West



021 840 7095



reception@winelandscardiology.com

WINELANDSCARDIOLOGY.COM