What are my risks when having a Cardiac Catheterization?

As with any surgical procedure, risks are present. In most cases, the benefits of these procedures far outweigh the risks. Risks related to the cardiac catheterization procedure include:

- Bleeding where the catheter is inserted
- Bleeding that may require a blood transfusion
- Bruising
- Allergic reaction to medication or dye
- Infection
- Damage to blood vessel
- Tear to the artery (small risk)

These conditions may occur after the procedure:

- Artery closes after being opened (restenosis)
- Need for an additional procedure or coronary artery bypass graft surgery
- Heart attack

Cardiac Catheterization

& Coronary Artery Disease



What is Coronary Artery Disease?

Coronary Artery Disease (CAD) happens when one or more coronary arteries of the heart become narrowed with a build-up of deposits of fats and cholesterol known as plaque. This progressive build-up of plaque causes the heart muscle to not receive the amount of oxygen it needs to function efficiently. Blood clots can form on the plaque, causing even more narrowing and further complications. This narrowing causes chest pain known as angina. There are several risk factors that are known to contribute to CAD. Some risk factors, such as family history of heart issues, cannot be controlled, however many risk factors can be controlled with lifestyle habits and healthy eating choices. Here are a few things you can do to reduce your risk of CAD and improve your heart health.

- Stop smoking
- Control your diabetes
- Control blood pressure with regular check-ups and/or medication
- Choose foods low in fat and cholesterol
- Exercise regularly
- Maintain an ideal body weight

What are symptoms of Coronary Artery Disease?

- Angina Pain
- Heartburn
- Nausea/Vomiting
- Fatigue
- Short of Breath
- Excessive Sweating

How can I help control Coronary Artery Disease?

- Controlled Exercise and Low Fat Diet
- Medical Therapy
- Bypass Surgery
- Balloon Angioplasty
- Coronary Stents

What is a Cardiac Catheterization & what should I expect?

Also known as "heart cath" or "Angiography", a heart catheterization is a procedure that allows the cardiologist to look at the patients' heart chambers, valves, blood vessels, and blood flow. This minimally invasive procedure will assist in the diagnosis and treatment of any heart condition that may be present and may help us determine if the patient has heart failure, congenital heart disease, heart valve abnormalities, arterial blockages, and if the patient is in the process of having a heart attack or if one has previously occurred.

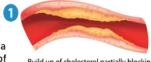
If, during the heart cath procedure, the patient is found to have narrowed or blocked arteries, a procedure by the name of Percutaneous Coronary Intervention (PCI) may be performed. This PCI, also known as an angioplasty, involves placing a stent in the narrowed or blocked artery.

Percutaneous Coronary Intervention (Also known as PCI or Angioplasty)

This minimally invasive endovascular procedure uses a long, thin tube called a catheter which is inserted into an artery, in the patients groin area or arm. During the PCI procedure, if narrowing or blockage is detected a hollow mesh tube known as a stent is placed along the artery walls. A tiny balloon at the tip of the catheter is inflated to open an artery and a stent is placed. A stent is a wire mesh cylinder that is placed inside the artery to safely hold that artery open. A stent is not always required, however when a stent is placed its purpose is to open the artery and prevent future blockages in that area of the artery. For some patients, a medication-coated sent (drug-eluting stent) may be used. Not all cases can be treated with PCI and those cases may require the patient being transferred to another facility.

Stent with Balloon Angioplasty

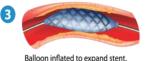
Diagram 1.1 The diagram at right is a visual representation of a narrowed artery and the PCI or angioplasty stent placement.



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Build up of cholesterol partially blocking blood flow through the artery.

Stent with balloon inserted into partially blocked artery.





balloon inhated to expand stent.

Balloon removed from expanded stent.