

## **Cleaning the Pipes**

### **What is a cardiac catheterization and how do you determine if a patient needs one?**

A “heart cath” is a procedure used to determine if there are any blockages in the arteries to the heart. The heart muscle has three main arteries that ride on top of it and give off branches that dive into the heart muscle. This test is indicated if a patient has a heart attack, abnormal stress test, or other worrisome symptoms. In the past, this procedure was done through the groin. Today, most cardiologists prefer the radial artery as access. In this method, a small catheter is passed through the artery in the wrist up to the heart arteries and pictures are taken with an x-ray machine. The pictures will tell us if there is a blockage or not.

### **Is this procedure done in the office or in the hospital?**

The procedure is done in the hospital. Many patients are not aware that most hospitals like Providence Hospital have a cardiac team on call 24 hours a day and 7 days a week to take care of patients with heart attacks. Patients should also request their preferred cardiologist upon arrival.

### **If a cath shows a blockage, what is the next step?**

Based on the location, severity, and amount of heart muscle at risk, a decision is made to “fix” the blockage. If so, the patient is given blood thinning medications and additional equipment is used to open up the narrowing. A small wire is passed across the tight blockage and a balloon with a stent on the tip is pushed past it. Then an inflation device “blows up” the balloon and the stent is pushed into the blood vessel wall. The stent remains behind when we deflate the balloon and blood can now flow through the artery.

### **Does a patient need to stay in the hospital and how long is recovery?**

If it is an elective procedure, we may send the patient home later that day or the next morning. If it is in the setting of a heart attack, we monitor the patient for a few days.

### **Will a stent keep a vessel open indefinitely?**

If the stent is well placed and the patient takes the proper medications, the stent will keep the vessel open at that site indefinitely. Occasionally the stent will fail, but that tends to be rare. However, other blockages can form at other sites in the same vessel so lifestyle changes and medications are needed.

### **When does a patient need open heart surgery?**

If there are multiple blockages in multiple vessels or critical blockages in certain vessels, by-pass surgery may be recommended.