

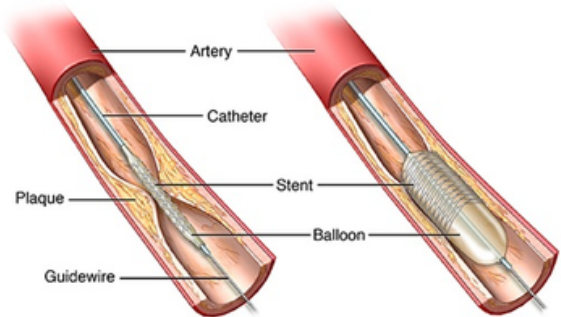
## CARDIAC CATHETERIZATION

### WHAT IS A CORONARY ANGIOPLASTY WITH AND WITH OUT STENT?

Coronary angioplasty, often combined with stenting, is a surgical procedure to improve blood flow in narrowed or blocked coronary arteries.

In this procedure, your doctor will widen your blocked artery with a **balloon (angioplasty)** and a **small, wire mesh tube (stent)**.

Below, we provide detailed information to help you understand the process and what to expect.



### TYPES OF STENTS:

- **Bare Metal Stent:** One of the first and most common cardiac stents made of stainless steel without any special coatings.
- **Drug Eluting Stent (DES):** Coated with medication that keeps the artery lining free of scar tissue and reduces the risk of restenosis.
- **Bio-Engineered Stent:** Coated with an antibody surface that captures Endothelial Progenitor Cells (EPCs) circulating in the blood. These cells come from the bone marrow and promote natural healing.
- **Bioresorbable Vascular Scaffold (BVS):** Covered with a drug-eluting coat on a dissolvable scaffold platform that the body absorbs over time. The drug works in the system and prevents restenosis. The scaffold becomes a part of the body, which reduces the chances of re-blockage.
- **Dual Therapy Stent (DTS):** Addresses issues of other stents, offering drug coating inside and outside with active healing technology. Benefits: Reduces inflammation and blood clot risks, promotes active healing, and prevents artery re-narrowing.

### PREPARATION:

Before the procedure, you must fast for 6 hours. Take your regular medications unless advised otherwise by your cardiologist. Patients undergoing angioplasty with or without stents typically require an overnight stay and are usually discharged the following day if everything is normal.

### WHAT TO BRING:

- Insurance Card and ID
- All current medications in original packaging
- For overnight stays: night attire, dressing gown, and non-slip slippers

## CARDIAC CATHETERIZATION

### PROCEDURE:

- Coronary angioplasty is performed in specialized hospital laboratories, such as Scripps Memorial Hospital in La Jolla.
- Patients lie on a narrow table that moves during the procedure.
- An intravenous line may be inserted for administering medicines.
- Local anesthetic is injected into the catheter insertion site (groin, wrist, or arm).
- The catheter is guided through the aorta to the coronary arteries, and X-ray contrast dye is injected to visualize blood flow.
- Different catheters may be used for studying various arteries.
- Angioplasty involves inserting a tiny balloon through the catheter to stretch and widen the narrowed artery.
- Stents may be inserted to prevent blockages from reoccurring.
- After the procedure, the catheter is removed, pressure is applied to the insertion site, and patients are transferred to the recovery area.

### RESULTS:

Your cardiologist will provide immediate feedback post-procedure.

### AFTER DISCHARGE:

- Follow your cardiologist's instructions for dressing removal and wound care.
- Keep the wound clean and dry, avoiding the use of powder.
- Check for signs of infection and report any concerns promptly.
- Discuss driving restrictions and medication changes with your cardiologist.

### RISKS/COMPLICATIONS:

While complications are rare, potential risks include:

- Hematoma (bruising and swelling)
- Infection (rare, treated with antibiotics)
- Allergic reaction to dye (notify your cardiologist of any previous reactions)
- Acute closure or rupture of coronary artery (emergency intervention may be required)
- Heart attack (rare, but your cardiologist is prepared to manage)

### FOLLOW-UP APPOINTMENT:

A follow-up appointment with your cardiologist will be scheduled within a week or two, along with any necessary medication adjustments.

Note: If you have concerns about the risks or any questions, please discuss them with your cardiologist.