

Understanding Angioplasty

The Cath Lab

- Catheter-based procedures are performed in a special room in the hospital, called the catheterization Laboratory or cath Lab.
- The room is fitted with high-resolution fluoroscopic and recording equipment.
- The fluoroscopic (XRay) can be rotated in various angles
- Views from various camera angles are recorded
- Recording of angiogram is done directly on a compact disc or a cassette.



- Its biggest advantage is that it is less invasive (surgical)
- Patient does not need anaesthesia and most of the patients can go home on the third day

Stent

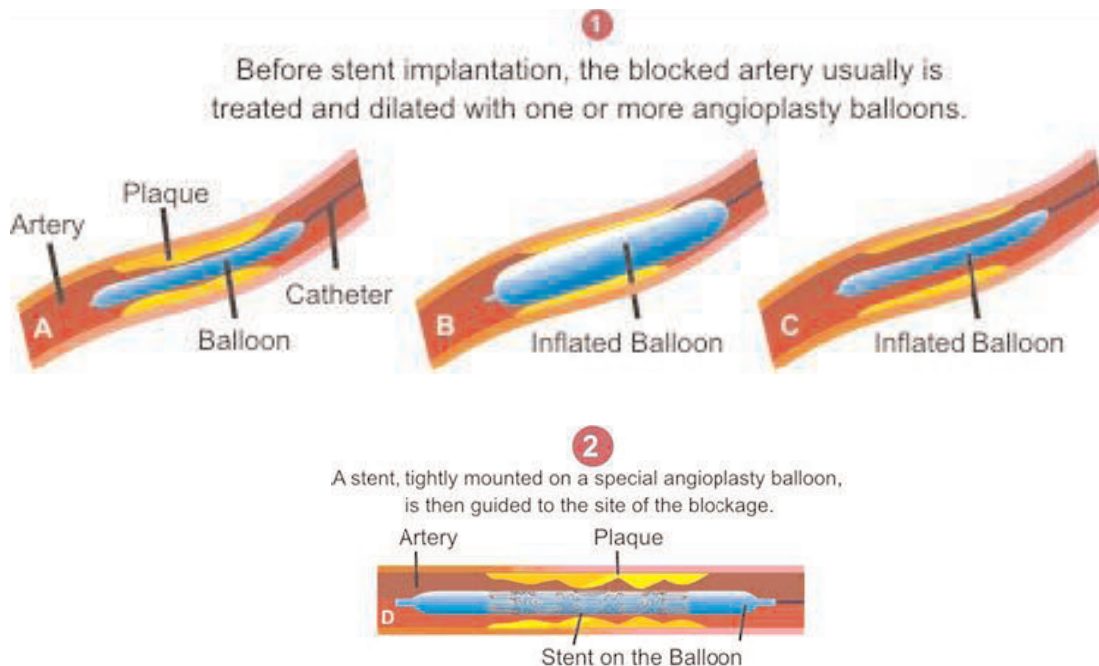
It is a metallic spring (like ball pen spring)

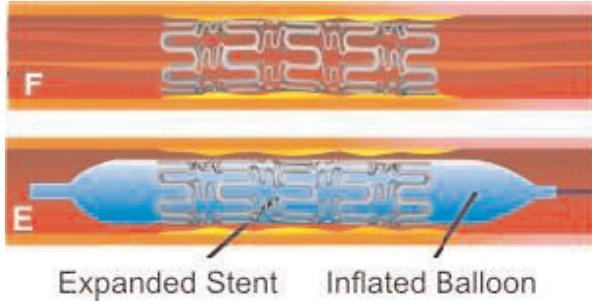
- It is a metal scaffolding
- Used to open blocked artery after Angioplasty
- Reduces the chances of reblockage
- A new type of stent coated with a drug can reduce the reblockage to 89% as compared to metal stents. They are known as Drug Eluting Stents (DES)
- Angioplasty can also be done in new blocks appearing in bypassed arteries (Graft Angioplasty)

Coronary Angioplasty

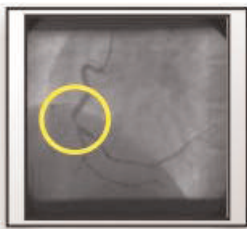
Medically it is called as Percutaneous Transluminal Coronary Angioplasty (PTCA)

- It is simple nonoperative way of opening blocks
- It is a mechanical solution to a biological problem

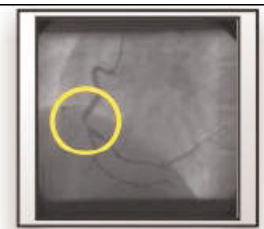




The angioplasty balloon is inflated to stretch open the stent and implant it into the walls of the blocked artery. The balloon is deflated and removed, and the stent remains permanently in place to hold the artery open.



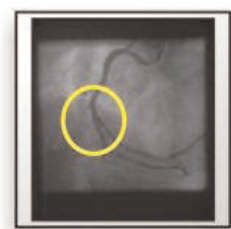
Tight block in right coronary artery



Tight block in right coronary artery



Block is crossed by wire



Block opened fully with stent