A SIMPLE GUIDE TO STENTS

As medical innovation has progressed, so have the options available to patients with coronary artery disease. Today, three types of coronary stents are available to treat blocked arteries. All have strong safety records and proven success at providing almost immediate relief from angina (chest pain or discomfort) and other symptoms of coronary artery disease. Each stent, however, has its own strengths and drawbacks, and every heart disease patient needs to be informed when it comes to talking about treatment options with a healthcare provider.

BARE METAL STENTS

The advent of the bare metal stent in the 1990s was a major development in the treatment of coronary artery disease.

Entering through the leg or wrist, a mesh metal tube is inserted into a coronary artery by means of a catheter (a thin, long flexible tube). A balloon is used to expand the stent, which opens the artery by pushing the plaque to the outer edge of the artery.

The Pros: The balloon angioplasties that preceded bare metal stents did not leave a supportive structure behind, and in some cases, the artery would constrict soon after the procedure. Bare metal stents prevented this early constriction and improved the long-term chance of the artery staying open.

The Cons: Within a year, some patients treated with bare metal stents experienced an obstruction of the artery. Scar tissue, the result of the bare metal stent embedding itself in the arterial wall, can form a blockage that causes symptoms similar to those of coronary artery disease. Doctors sometimes have to perform a second angioplasty to clear the artery.

DRUG-ELUTING STENTS

Considered an upgrade from bare metal stents, doctors began using drug-eluting stents in 2003. Drug-eluting stents are coated with a medication that helps prevent scar tissue from building up while the artery heals.

The Pros: Drug-eluting stents dramatically reduce the blockage caused by scarring. Some people still experience tissue buildup that requires a second treatment.

The Cons: Patients who receive drug-eluting stents have an implant in their body permanently. These patients face the risk of future blockages associated with metal stents. To help address this risk, doctors prescribe blood-thinning medication that patients may have to take long-term.

FULLY DISSOLVING STENTS

Fully dissolving coronary stents are a new innovation in angioplasty technology. Unlike bare metal stents and drug-eluting stents, these are made from a material that fully dissolves in approximately 3 years.

The Pros: As the stent dissolves over time, it breaks down into natural elements already present in the body: water and carbon dioxide. The artery is restored to its natural state and can remain open without the extra support of the stent, enabling the treated segment of the artery to flex naturally as it should to supply your heart with the oxygen it needs.

Without a foreign object left behind, naturally dissolving stents avoid future complications related to permanent devices, allowing you to look forward to a future with renewed possibilities.

The Cons: Naturally dissolving stents have an impressive safety record, but many healthcare providers may not know about the new technology. It’s important for patients to initiate a dialogue with their doctor about which stent is right for them.