Glossary of vascular terms

Angina–Sharp, suffocating pain in the chest, usually due to interference with the supply of oxygenated blood to the heart muscle; sometimes called angina pectoris.

Angiographic binary restenosis (ABR)—Percentage of patients with a follow-up percent diameter stenosis of greater or equal to 50% determined by quantitative coronary angioplasty. ABR can occur without the presence of clinical symptoms.

Angioplasty-A procedure used to unblock an artery clogged with plaque; also known as percutaneous transluminal coronary angioplasty (PTCA), or balloon angioplasty. Often followed by the placement of a stent in the unclogged area.

Anticoagulant–A blood thinning agent used to prevent or reduce clotting.

Antiproliferative drug–A medication used to prevent the abnormal growth of tissue following stent implantation.

ARC definitions—Expanded definitions of stent thrombosis created by the Academic Research Consortium, a group of physicians, research groups, major stent manufacturers and others (also called the "Dublin definitions").

Arteriosclerosis–A group of diseases characterized by thickening or hardening of the arteries and loss of blood flow to the heart due to plaque; can lead to angina (chest pain) or myocardial infarction (heart attack).

Bare metal stent–A stent not coated with an antiproliferative drug for inhibiting restenosis.

Catheter–A tube-like instrument used to access a body cavity; in angioplasty, a catheter provides access to the artery for the delivery of a balloon or stent.

Catheterization–A test in which contrast dye is injected into blood vessels, allowing a physician to view via X-ray where an artery is narrowed.

Cobalt alloy–The material used in next-generation drugeluting stents; this material is denser, stronger and more flexible than previous generation stainless steel stents.

Coronary angiogram—A fluoroscopic picture of the blood vessels of the heart, in which contrast dye is injected into the arteries, enabling a physician to view narrowing or blockages.

Coronary artery—An artery of the heart that supplies oxygenated blood.

Coronary artery bypass graft (CABG)—An invasive medical procedure in which a section of an artery from another portion of the body is used to bypass a blockage in a coronary artery to improve blood flow to the heart.

Deliverability—The ease with which a stent can be advanced through the coronary vasculature.

De novo–New, untreated; such as a coronary artery that has not been previously treated.

Drug-eluting stent (DES)–A stent coated with an antiproliferative drug such as zotarolimus that inhibits restenosis.

Dual antiplatelet therapy–The combination of aspirin and a second anticlotting medication such as clopidogrel (also called Plavix®) to reduce the risk of blood clots following stent implantation.

Endothelialization–Following stent implantation, the healing process of tissue regrowth over the stent to prevent thrombosis.

Femoral artery—An artery in the leg used as an access point to insert a device such as a catheter or stent, which are pushed through the artery to the site of the lesion or blockage.

In-segment–A measurement of the length of a deployed stent plus 5 millimeters on either side of the stent.

In-stent-A measurement of the length of the deployed stent.

Interventional Cardiology–Medical specialty devoted to the practice of minimally-invasive cardiac procedures.

Late loss-The difference in measurements of a blood vessel lumen diameter before and after a stent procedure, as shown with angiography.

Late stent thrombosis—A blood clot that forms on the stent 30 days to 1 year post-implant. See stent thrombosis.

Lesion–A blockage in a blood vessel that is interrupting blood flow to the heart, often due to plaque; also called stenosis.

Lumen-The cavity or hollow space inside a blood vessel.

Major adverse cardiac events (MACE)—Clinical events following a stent procedure that include death, myocardial infarction, emergent CABG and target lesion revascularization.

Malapposition–When a stent is not positioned properly (flush) against the interior arterial wall; late incomplete malapposition occurs when the stent later pulls away, or degrades, leaving a space.

Neointimal hyperplasia–A medical term indicating the abnormal growth of new tissue over a stent.

Occlusion-A blockage; a state of being closed.

Paclitaxel—An antirestenotic drug used on some drugeluting coronary stents.

Percutaneous coronary intervention (PCI)–A minimally invasive procedure to treat narrowed arteries.

Platelet-Cell fragments circulating in the blood that can lead to blood clots and thrombosis if they aggregate.

Plavix–An antiplatelet drug often prescribed for patients following a stent procedure; also known as clopidogrel.

Polymer–A special molecular compound that coats a stent and helps control the release of the restenosis-inhibiting drug into the heart vessel wall.

Restenosis–The renarrowing of an artery in the same location of a previous treatment; clinical restenosis is the manifestation of an ischemic event, usually in the form of recurrent angina. (See angiographic binary restenosis.)

Revascularization–A procedure to unblock or bypass a clogged artery.

Sirolimus–An antirestenotic drug used on some drugeluting coronary stents.

Stent–A tiny mesh cylinder that expands within a blood vessel and props open a previously clogged artery.

Stent thrombosis–A blood clot that forms on the stent; categorized as early stent thrombosis (0–30 days postimplant), late stent thrombosis (30 days -1 year postimplant) and very late stent thrombosis (more than 1 year post-implant).

Target lesion revascularization (TLR)–Any repeat percutaneous intervention of the target lesion or bypass surgery of the target lesion.

Target vessel failure (TVF)-When a patient experiences death, myocardial infarction (heart attack), emergent CABG or TLR that cannot be attributed to a vessel other than the target vessel; the combination of TVR and MACE.

Target vessel revascularization (TVR)—Revascularization needed when a patient experiences a recurrence of symptoms and the lesion is somewhere along the length of the previous vessel treated.

Thrombosis–The formation of blood clots in arteries that can lead to myocardial infarction or death.

Very late stent thrombosis–A blood clot that forms on the stent 1 year or more post-implant. See stent thrombosis.

Zotarolimus–A noncytotoxic drug used on the Medtronic Endeavor drug-eluting stent.