

## ROTATIONAL ATHERECTOMY

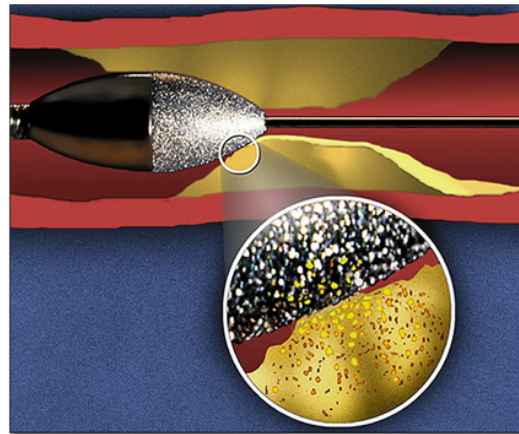
### ***What is a rotational atherectomy (Rotablator)?***

A rotational atherectomy is a type of interventional coronary procedure. It helps open blocked coronary arteries and restores blood flow to the heart. This procedure utilizes a high speed rotational “burr” that is coated with microscopic diamond particles. It rotates at high speed (approximately 200,000 rpm), breaking up blockages into very small fragments (smaller than red blood cells) which can pass, harmlessly, into the circulation. Often angioplasty is performed after rotational atherectomy to improve the results.

### ***What are the risks?***

The risks of rotational atherectomy are low. The risks include all of the complications noted for cardiac catheterization; but some of the risks, specifically heart attack and emergency bypass surgery, are higher because rotational atherectomy is a more complex procedure. The risks are similar to angioplasty. The risks include bleeding around the heart and injury or tearing of an artery, which can cause the artery to close. This is often successfully treated with continued angioplasty. In rare cases, the tear is difficult to treat. One to three percent of patients may have a heart attack, and one to two percent may need emergency bypass surgery. In three to five percent of patients, the procedure is unsuccessful because the catheter cannot be advanced to the blockage or the artery cannot be fully opened. This can occur when the artery is small, has calcium deposits, or has severe bends.

**Rotational Atherectomy Burr**



### ***What are the benefits?***

Rotational atherectomy will open blocked arteries and improve blood flow to your heart. It relieves symptoms, improves exercise duration, and in some cases stops or prevents heart attacks. It may be more effective than medications in relieving symptoms in patients with a blockage in one artery. Following an atherectomy, many patients can stop or reduce their number of heart medications.

### ***How effective is rotational atherectomy?***

Rotational atherectomy is initially successful in about 95% of patients. However, about 30% to 50% of patients will develop a recurrence of the blockage or restenosis. The healing process within the artery can cause an overgrowth of cells and other substances that cause a recurrence of the blockage. Restenosis usually occurs during the first six months. Your doctor will follow you closely for a return of symptoms and may even perform an exercise stress test. If a blockage returns, you can be treated with medications, a second rotablator or other interventional procedure, or possibly bypass surgery. Only about 25% of patients will need a repeat angioplasty.

### ***Is rotational atherectomy right for you?***

Rotational atherectomy can be used to treat many types of blockages. It is not used as frequently as angioplasty because it is a more complex procedure with similar complication rates and restenosis rates. Rotational atherectomy may be superior to angioplasty in treating blockages

which are too rigid from calcium deposits to be easily expanded with angioplasty, which are long, which are located in small arteries, which are located at branch points in the artery, or which is a restenosis in a previously placed stent. Rotational atherectomy should not be used in treating blockages in prior bypass grafts or blockages with associated blood clot, such as after a recent heart attack.