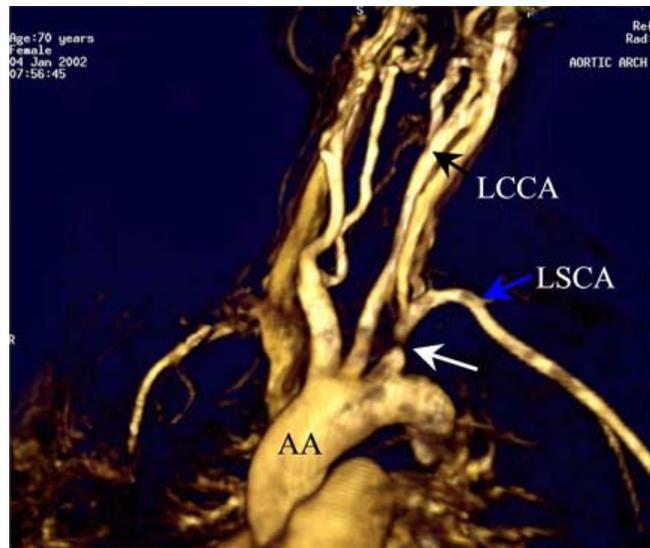


## Carotid Stenting

Narrowing of the carotid artery is caused by atherosclerosis. This is a build up of cholesterol and calcium in the wall of the artery causing a reduction in blood flow to the brain. This can eventually cause stroke, brain damage and possibly death. Stroke is the third leading cause of death in the United States. More than 140,000 people die each year from stroke in the United States. Stroke is the leading cause of serious, long-term disability in the United States. Each year, approximately 795,000 people suffer a stroke.

### Common signs and symptoms of a stroke or TIA (mini-stroke) may include:

- Sudden numbness or weakness of the face, arm or leg, especially on one side
- Sudden confusion or dizziness
- Sudden trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, loss of balance or coordination
- Sudden, severe headache with no known cause
- Sudden trouble swallowing



Carotid artery blockages dramatically increase a person's risks of stroke. Treatment options for carotid artery blockages include open surgical option – called carotid endarterectomy where an incision is made in the neck and carotid artery angioplasty and stenting (CAS) which is a minimally invasive technique that has been developed over the last several years. During angioplasty of the carotid artery, a balloon catheter is guided to the area of the blockage or narrowing. When the balloon is inflated, the fatty plaque or blockage is compressed against the artery walls to improve blood flow. Then, a carotid stent (a small, metal mesh tube) is placed inside the carotid artery at the site of the blockage and provides support to keep the artery open.

Cleaning out the plaque in the carotid artery can lead to a piece of plaque breaking off and causing a stroke during either of the procedures. One device that Heart Care Center cardiologist Dr. Ravi Rao utilizes which has increased the safety of carotid artery stenting is the MO.MA device that offers a unique way to protect the brain during CAS.

