What is CREST?

**Carotid**
**Revascularization**
**Endarterectomy vs. Stenting**
**Trial.**

**CREST** is a study for people who have had a small stroke or a temporary stroke called a transient ischemic attack (TIA).

Why CREST?

CREST physicians want to find a better way to prevent strokes in people who have a narrowing in their carotid artery. This research study will compare **carotid endarterectomy**, a common operation to prevent stroke, to a study procedure, called **carotid artery stenting**. Patients who agree to participate in the CREST study will receive either carotid endarterectomy or carotid artery stenting to treat the narrowed area in their carotid artery.

You have been given this brochure because you or someone you know may be eligible to participate in the CREST study.
What is the purpose of this study?

CREST physicians are trying to determine the safest way to prevent strokes in people who have a partial blockage (or narrowing) of the carotid artery and have already had a small stroke or TIA.

Who may be involved in the study?

- Adult men and women who have had a small stroke or TIA and who also have moderate to severe narrowing of at least one of their carotid arteries.

Your carotid arteries will be examined by ultrasound or x-rays to see how much narrowing has taken place. If one of your arteries is significantly narrowed and your physician feels you are a good candidate, you may be eligible to participate.

Why do the carotid arteries get blocked?

The carotid arteries are the major vessels that supply blood to the head, moving up both sides of the neck to the brain and face. When blood flow to the brain is blocked, a serious medical condition called a stroke or brain attack can occur. The narrowing or blockage is often caused by a buildup of blood clots and fatty plaques (like cholesterol) in the fork of the carotid artery where it branches into the vessels that supply blood to the face and brain.

How is carotid artery stenting (CAS) performed?

- Ultrasound, or carotid Doppler uses sound waves to measure the rate of blood flow through the artery. (You may have already had this test.)

- Cerebral angiography uses a contrast material injected into an artery (usually in the groin) to make the vessels in the head and neck visible in x-rays. Pictures are then taken and the amount of narrowing is measured.

How is carotid endarterectomy (CEA) performed?

- By a qualified surgeon using general or local anesthesia
- The plaque is carefully removed
- Blood flow to the brain is restored

CEA has been the standard of care for the treatment of carotid stenosis for the last four decades.

How is carotid artery stenting (CAS) performed?

- By a qualified physician using local anesthesia
- A mesh-like metal device called a stent is placed in the narrowed part of the artery to hold it open
- Blood flow to the brain is restored

Will I have to take any medications as part of the study?

- If you have either procedure you will need to take aspirin daily for the duration of the study.
- If you have CAS you will also need to take a medicine (clopidogrel or ticlopidine) daily for four weeks after the procedure.
- Your physician may ask you to take other medicines to control your blood pressure or cholesterol.
What will happen in the study?

If you are interested in participating in the CREST study, you will be asked to come to a local CREST center:

- For further tests
- To answer questions about your health
- To learn more about the study

If you choose to participate:

- You will be assigned by chance (as in the flip of a coin) to receive either the CEA or the CAS procedure.

After the procedure, you will need to return to your CREST physician for follow-up exams at:

- 1 month
- 6 months
- Every 6 months thereafter

You will also receive phone calls from the study nurse at:

- 3 months
- 9 months
- Every 6 months thereafter

What are the benefits of taking part in this study?

The major goal of CREST is to compare the risks and benefits of the two treatments (CEA and CAS) at medical centers around the US and Canada. During this study, you will receive one of these two treatments.

No personal benefit can be guaranteed to you by your participation in this study. However, the information from this study will help determine the best way to prevent strokes in other people like you.

Ask your doctor

Being in CREST will mean that you, your primary care doctors, and the CREST study doctors will all work together for your health. If you want to find out more about the CREST study, please contact your local CREST center at the number listed below.

This facility is one of 70 medical centers that will be participating in this study. CREST is seeking 2,500 participants across the United States and Canada to be in this study. The physicians chosen to participate in CREST were selected because they have previous experience and are skilled at performing the procedures.