New treatments for drug resistant high blood pressure
22 January 2018, by Laura Wright

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When lifestyle changes aren't adequate, prescription drugs can be used separately or in combination to reduce hypertension. However, according to the American Heart Association, nearly half of all Americans find that lifestyle changes and medications don't work well enough.

If you are one of these people, there are two new therapies being tested that might help.

The SPYRAL trial is testing a new therapy that targets the nerves in the kidney responsible for signaling to the brain and playing a role in raising blood pressure. During the procedure, a small opening is made in the groin to access blood vessels in the kidney using a flexible tube called a catheter. A special device is then used to alter these nerves surrounding the kidney artery and reduce the signals they send to the brain. Recent research indicates that this therapy, called renal denervation, reduced blood pressure an average of 10 points – a significant change.

The CALM trial targets another area responsible for regulating blood pressure present in the main artery in the neck, the carotid artery. Microscopic "sensors" in the wall of the carotid artery sense blood pressure levels and signal to the brain to respond if that level gets too high. In this case, a catheter is positioned in the carotid artery and a tiny device is inserted where these sensors are to manipulate the signals to the brain, resulting in lower blood pressure.

Because it has no obvious symptoms, hypertension is known as the "silent killer." The best first step is to know your blood pressure readings and work with your doctor to control high blood pressure if necessary. If you've exhausted all other options, talk with your doctor about clinical trials such as these that may contribute to better control of your