## What is Renal Denervation (RDN) Therapy?

Traditionally, patients with high blood pressure are encouraged to adopt healthy lifestyle habits and are often given antihypertensive medications.

Unforturnately, some patients inspite of change of life styles and medications are not enough to control the high blood pressure despite the use of three or more antihypertensive drugs one of which is a diuretic. Therefore resistant hypertensive individuals require more aggressive treatment than lifestyle changes and medications can provide.

One of the treatment option for resistant hypertension is Renal Denervation (RDN).

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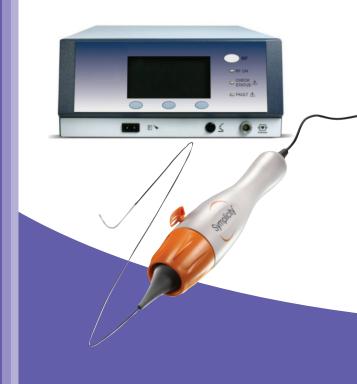
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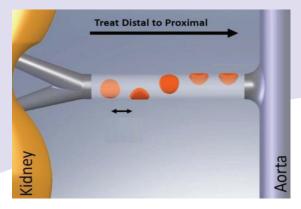
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## Renal Denervation (RDN) Therapy

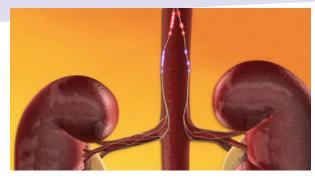




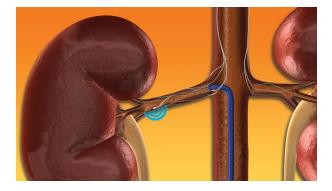
- Renal artery access via standard interventional technique
- 4-6 two-minute treatments per artery
- Proprietary RF generator
  - Automated
  - Low power
  - Built-in safety algorithms

## How it works?

The renal denervation system consists of a small steerable treatment catheter and an automaticallycontrolled treatment delivery generator. The treatment does not require open surgery. The doctor will make a tiny incision in the groin and insert a small tube into your femoral (thigh) artery. A guiding catheter is then inserted through the sheath to direct the RF catheter to the renal arteries. The RF catheter delivers high-frequency radio waves, called RF waves, to 4-6 locations within each of the two renal arteries. The energy delivered is about 8 watts, similar to that used to power a flashlight. This energy delivery aims to disrupt the nerves and lower blood pressure over a period of months.



**Figure 1**. Nerve hyperactivity between the brain, heart and kidneys can cause high blood pressure. The renal denervation system is designed to quiet these nerves and reduce blood pressure.



**Figure 2**. The RF catheter delivers RF waves to the locations within each of the two renal arteries, aiming to disrupt the nerves and lower blood pressure.

Complications related to the contrast dye used Complications related to pain and antianxiety medications administered.

Additional risks that could possibly be associated with RDN therapy include but are not limited to:

- Kidney damage
- Injury to the artery
- Reduction of blood pressure to low or fast, leading to complications
- Pain Infection
- Skin burn Blood or protein in urine
- Electrolyte changes

Continuing to manage your High Blood Pressure

After receiving RDN therapy it is important to maintain a healthy lifestyle. This involves carefully following your doctor's advice.

- Stop smoking
- Limit alcohol
- Increase your activity
- Choose a healthy diet
- Manager your stress
- Continue taking your blood pressure medication.