Study: Acute Transdermal Vagal Stimulation for the Treatment of Postural Tachycardia Syndrome

Do you feel lightheaded and dizzy and have a high heart rate when sitting upright or standing? Have you had these symptoms for more than 3 months? If so, you may have postural tachycardia syndrome (POTS). If you are between 18 and 75 years old and are not pregnant, you may be a good fit for our research at the Clinical Research Center of Vanderbilt University in Nashville.

We would like to know how tiny electrical stimulation (not painful) of the skin of your ear lobe may affect your heart rate and blood pressure. We hope this study will help us to develop a new therapy for your disease.

If you are eligible, you will stay in the Clinical Research Center for 5 days. You will receive a special diet during this time.

We will perform an initial screening of your heart activity, blood pressure, and medical history. We will perform a test of how your heart and blood pressure change in response to changes in position (lying down, sitting, standing) and during breathing, exercise (handgrip), and putting your hand in ice water for one minute.

We will test your responses to stimulation on the ear lobe while lying down on one day and during upright tilt on two other days. During these tests we will measure your heart rate and blood pressure and take some blood.