

MEDICAL BREAKTHROUGHS **RESEARCH SUMMARY**

TOPIC: STOP SHAKING: ELIMINATING ESSENTIAL TREMORS WITHOUT SURGERY
REPORT: MB #4825

BACKGROUND: Essential tremor (ET) is a neurological disorder that causes your hands, head, trunk, voice or legs to shake rhythmically. It sometimes gets confused with Parkinson's disease, but is the most common nervous system disorder. Everyone has a small degree of tremor, but the movements usually cannot be seen or felt because the tremor is so small. When tremors are noticeable, the condition is then an essential tremor. It is most common among people older than 65 but can affect people at any age. The cause of ET is unknown. However, one theory suggests the cerebellum and other parts of the brain are not communicating correctly. In most people, the condition seems to be passed down from a parent to a child. So, if your parent has ET, there is a 50% chance you or your children will inherit the gene.

(Source: <https://www.hopkinsmedicine.org/health/conditions-and-diseases/essential-tremor-disorder>)

SYMPTOMS, SIGNS AND DIAGNOSIS: If you have essential tremors, you will have shaking and trembling at different times and in different situations, but some characteristics are common to all. Some may experience tremors occurring when you move but are less noticeable when you rest; when you take certain medicines, caffeine or are experiencing stress and as you get older. The signs of tremors are most obvious in your hands. You will have difficulty doing tasks such as writing or using tools. You may have a shaking or quivering sound in your voice and uncontrollable head-nodding. Diagnosing tremors happens with a comprehensive neurological examination by an experienced clinician. Your doctor will probably need to rule out other conditions that cause shaking or trembling like hyperthyroidism and alcohol use disorder.

(Source: <https://www.hopkinsmedicine.org/health/conditions-and-diseases/essential-tremor-disorder>)

BREAKTHROUGH TREATMENT: A new procedure for treating essential tumor is MR-guided focused ultrasound. It uses high-intensity focused ultrasound energy, guided by magnetic resonance imaging (MRI), to heat a small, targeted area of tissue in the brain. This procedure can be done while the patient is awake and happens inside an MRI scanner. The scanner measures, very precisely, the increased temperature in the brain caused by the ultrasound energy. This energy causes a small burn in the targeted tissue. Because ultrasound can pass through skin, muscle, fat, and bone without incisions, it is an ideal treatment tool. Ultrasound energy is also non-ionizing, meaning that you are not exposed to potentially dangerous radiation during the procedure.

(Source: <https://healthcare.utah.edu/neurosciences/neurosurgery/focused-ultrasound.php>)

FOR MORE INFORMATION ON THIS REPORT, PLEASE CONTACT:

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If this story or any other Ivanhoe story has impacted your life or prompted you or someone you know to seek or change treatments, please let us know by contacting Marjorie Bekaert Thomas at mthomas@ivanhoe.com