

## **Patient Awareness Initiative: Frequently asked questions for the non-invasive treatment of Parkinson's Disease with MRgFUS.**

Here are some frequently asked questions (FAQs) about MRgFUS for Parkinson's Disease:

### **General Information**

#### **Q1: What is MRgFUS?**

**A1:** MRgFUS stands for Magnetic Resonance-guided Focused Ultrasound. It is a non-invasive procedure that uses focused ultrasound waves to target and treat specific areas of the brain, guided by MRI imaging, to alleviate symptoms of Parkinson's Disease.

#### **Q2: How does MRgFUS work for Parkinson's Disease?**

**A2:** MRgFUS focuses ultrasound waves on a small area of the brain, such as the globus pallidus or thalamus, which are involved in motor control. The ultrasound waves generate heat, creating a lesion that disrupts the abnormal brain signals causing the symptoms.

#### **Q3: WHAT IS PARKINSON'S TREMOR?**

**A3:** Parkinson's tremor is characterised by uncontrollable shaking that affects a part or parts of the body (for example, the hand). It's one of the main symptoms commonly associated with Parkinson's disease (PD), a progressive neurological disease that affects the brain.

Parkinson's disease is a complex condition that presents differently in every individual, and not everyone with Parkinson's experiences Parkinson's tremor. For many individuals, however, tremor is the first symptom they experience, often appearing in the hand or foot. Tremor-dominant Parkinson's is when tremor is your main symptom that needs management.

A Parkinson's tremor is more likely to appear as a resting tremor, which means it happens while the body is at rest. One of the most common examples is called a 'pill-rolling' tremor because it appears as if you are trying to roll a pill between your thumb and index

finger. It can also be experienced as an action tremor (shaking while trying to drink a glass of water) or an internal tremble (a trembling felt inside the body but not noticeable from the outside).

**Q4: What are the benefits of treatment of Parkinson's Disease with MRgFUS?**

**A4:** It is a non-invasive (knife-less, incision less) treatment, Low to no risk of infection, Fast recovery, Immediate results, No hospitalisation and No General Anaesthesia.

**Eligibility and Preparation**

**Q5: Who is a candidate for MRgFUS treatment for Parkinson's Disease?**

**A5:** Candidates are typically patients with Parkinson's Disease who have not responded well to medications or other treatments and experience significant impairment in their daily activities. It is usually considered for those with motor symptoms like tremors and dyskinesia.

**Q6: What should I do to prepare for the MRgFUS procedure?**

**A6:** Preparation may include fasting for a certain period before the procedure, stopping certain medications, and undergoing pre-procedure assessments like MRI scans. Your healthcare provider will give you specific instructions.

**Procedure Details**

**Q7: What happens during the MRgFUS procedure?**

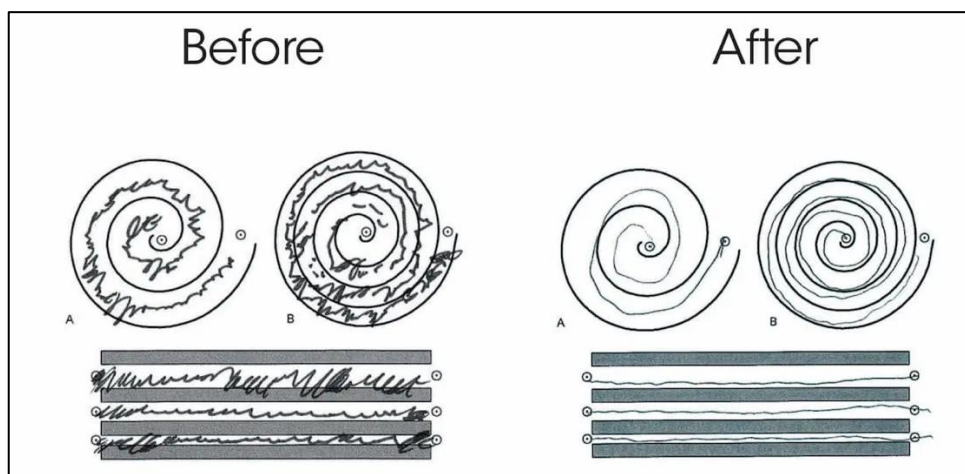
**A7:** During the procedure, you will lie in an MRI machine while the ultrasound waves are directed at the targeted area in your brain. The procedure is monitored in real-time with MRI imaging. You will be awake and able to communicate with the medical team throughout the process.

**Q8: How long does the MRgFUS procedure take?**

**A8:** The entire procedure usually takes between 2 to 4 hours, including preparation and post-procedure assessments.

**Q9: Can you see results of MRgFUS in real time during procedure?**

**A9:** In real-time, the doctors will confirm the tremor is getting better. We talk with you to make sure you're comfortable, and we take more pictures using MRI. We may ask you to move in certain ways or to write or draw to see how your tremor responds.



**Safety and Side Effects**

**Q10: Is MRgFUS safe?**

**A10:** MRgFUS is generally considered safe, but like any medical procedure, it carries some risks. Common side effects include temporary headache, nausea, or dizziness. Rarely, there may be more serious complications such as balance issues or sensory disturbances.

**Q11: Are there any long-term side effects?**

**A11:** Long-term side effects are rare, but some patients may experience numbness or tingling, balance problems, or speech difficulties. Continuous follow-up with your healthcare provider is essential to monitor any potential long-term effects.

## **Post-Procedure and Recovery**

### **Q12: What can I expect after the MRgFUS procedure?**

**A12:** Most patients experience improvement in their symptoms, which continues to improve over time. You may need to stay in the hospital for observation for a few hours or overnight. Some temporary side effects like headache or dizziness might occur.

### **Q13: What follow-up is recommended?**

**A13:** We are currently doing MRI brain at 3 months postoperatively and there is an assessment of tremor performed at 1 month, 3 months, 6 months and 12 months and then annually thereafter.

### **Q14: How soon can I resume normal activities after MRgFUS?**

**A14:** Most patients can return to their normal activities within a few days after the procedure. Your healthcare provider will give you specific recommendations based on your individual case.

## **Effectiveness**

### **Q15: How effective is MRgFUS in treating Parkinson's Disease symptoms?**

**A15:** Clinical studies have shown that MRgFUS can significantly reduce motor symptoms such as tremors and dyskinesia in many patients, improving their ability to perform daily activities. The degree of improvement varies among individuals.

### **Q16: Will I need additional treatments after MRgFUS?**

**A16:** MRgFUS is designed to provide long-term relief from symptoms, but some patients may require additional treatments if symptoms recur or do not fully resolve. Follow-up with your healthcare provider is crucial for ongoing management.

## **Costs and Insurance**

### **Q17: Is MRgFUS covered by insurance?**

**A17:** Coverage for MRgFUS varies by insurance provider and policy. It is essential to check with your insurance company to determine if the procedure is covered and to understand any out-of-pocket costs.

### **Q18: How much does MRgFUS cost?**

**A18:** The cost of MRgFUS can vary widely depending on the hospital, location, and specific circumstances of the patient. It is best to discuss the costs with your healthcare provider and insurance company to get an accurate estimate.

## **Additional Questions**

### **Q19: Can MRgFUS be used to treat other conditions?**

**A19:** Yes, MRgFUS is being investigated and used for other conditions, such as essential tremors, certain types of pain, and some types of tumours. Research is ongoing to expand its applications.

### **Q20: How do I find a qualified center or specialist for MRgFUS?**

**A20:** In Indian subcontinent, Middle East and Africa, the only place where MRgFUS treatment is available is at Royal Care Super Specialty Hospital, Coimbatore Tamilnadu. You can start by consulting our neurologist for recommendations.

### **Q21: How many patients have been treated till date with MRgFUS?**

**A21:** MRgFUS is now approved by US FDA and Central Drugs Standard Control Organisation(CDSCO) under Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India for the treatment of Essential Tremors and Parkinson's disease. Globally, more than 12,000 patients have been treated and in India, Royal Care Super Specialty Hospital had successfully treated more than 95 patients in last 18 months.

If you have specific questions or concerns about MRgFUS treatment for essential tremors, it is best to consult with our Neurologist who is a specialist in neurological disorders and has an experience of successfully treating patients with Parkinson's Disease. For any help, you can contact our dedicated Neuro diseases helpline at +91 80623 58663.