MR Guided Focused Ultrasound for Fibroids (MRgFUS)

What is MR Focused Ultrasound?

This is an non-surgical method for treating uterine fibroids in the select patient using ultrasound energy to shrink the volume of the fibroid.

Is MR Focused Ultrasound effective?

Yes. In patients that meet treatment criteria, this method has comparable outcomes to other procedures such as myomectomy or Uterine Fibroid Embolization. MRgFUS is not more effective than these other treatment options, but does have the advantage of a speedy recovery, typically within 1 - 7 days.

Who is a candidate?

Women who are interested in preserving future fertility or want an alternative to myomectomy.

What factors determine maximum success?

* Fibroids that are 2-10 cm in size. Larger fibroids can be pre-treated with Lupron to reduce volume.
* A small number of fibroids (1-3)
* Fibroid that can be reached with the ultrasound device avoiding bowel and spine
* Fibroids that are not hypervascular or hyperintense on certain MRI images

What are the advantages?

* No surgical scars on the body or uterus
* Single procedure
* No general anesthesia
* Minimal pain after the procedure, and same day discharge after 1-2 hours
* Quick recovery time of 1-7 days.
* Patients can attempt vaginal delivery vs myomectomy, which requires C-section for subsequent pregnancies.

What are the procedural details?

* Prone position on the MRgFUS table, with the lower abdomen in a pool of water, on a gel pad, above the ultrasound device, which is built into the MR table
* IV and foley catheter placement during the procedure. Rectal gel is also placed to protect the bowel
* After imaging, we then start the treatment, moving the ultrasound focus inside the fibroid to heat a small portion of the fibroid delivered in cycles of 30 seconds on, 90 seconds off till maximum amount of fibroid is treated.
* Strong pelvic cramping may be felt during the procedure. Pain is controlled with pain medications during the procedure.

What is expected symptom relief?

* The effects are not immediate. After treatment, the fibroid softens, and begins to shrink. This process takes about 3 - 6 months
* Patients typically notice an improvement in bulk symptoms the first month, with continued improvement over time.
* Bleeding symptoms tend to improve over the course of 1-3 cycles.

Where to find more information?

Please check out the video MRgFUS on the Stanford website video library