

Putting Patients First

Offering non-invasive fibroid treatment is only part of the story – this center offers patients something they can't always find: time





In 2008, Klinikum Dachau, a hospital of Amper Kliniken AG, Germany, founded the Myomzentrum, a center for the treatment of uterine myoma, a benign tumor also known as a fibroid. As part of its extensive range of treatments, the center introduced MR-guided Focused Ultrasound (MRgFUS), a non-invasive outpatient treatment for uterine myoma that employs focused ultrasound waves to destroy fibroid tissue using MR images to guide treatment.

Initially, Myomzentrum utilized the hospital's MR system to capture images of the uterus. Patient volume hovered around 12 cases per month. Continued interest in the procedure, however, as well as high patient satisfaction, led the company to purchase a ExAblate 2000 and dedicate it to MRgFUS. Treatments commenced on the new MRgFUS in the beginning of March, 2010.

Patient service key to success

According to Dr. Matthias Matzko, Chief Physician of Interventional and Diagnostic Radiology at the center, patient service is at the heart of the unit's success. "Our staff is accessible to patients at all times, listening carefully to their needs and concerns, and spending sufficient time explaining all the available treatment options," he explains. "We're with our patients from the initial phone contact through follow-up."

Women can contact the center via a 24-hour MRgFUS hotline, where fully trained nurses provide detailed information on MRgFUS as well as other treatment options. "Nurses have spent up to two hours talking to a single caller to answer all their questions," adds Dr. Matzko. Potential patients can receive additional information upon request or access the center's website for detailed information on treatment options and FAQs.

All women undergo a thorough patient selection process that begins with an initial MRI, which can be conducted near their home or at the center, explains Dr. Matzko. Patient's can then discuss the results with a member of Myomzentrum's radiology team or immediately schedule the procedures.

The center's location in the hospital is a key patient benefit, explains Dr. Matzko. "While MRgFUS can be performed in an ambulatory environment, patients are reassured knowing they can stay overnight if needed. MRgFUS is a relatively new treatment and patients don't really know what to expect. Being in a multidisciplinary environment helps further allay their concerns," he says.

Each week, the team holds inter-disciplinary conferences to discuss the different cases and therapy options – especially when it comes to complex cases – before deciding on the best treatment for each patient. "Working under one roof enhances the MRgFUS process and quality of treatments. It's important for our patients' care that we work together and share information to ensure the best possible treatment."



Dr. Matzko points out that if a patient is not a candidate for MRgFUS, the hospital offers additional available myoma treatments, including embolization, myomectomy and hysterectomy. Once the patient is in contact with the center, they tend to have their minimally invasive or surgical treatment at the hospital, he says.

"Patients come from all over Germany and other parts of the world because they feel comfortable, well-informed and know our facility can provide them the best possible care," he adds. "In fact, the wife of a former German politician was treated with MRgFUS at the unit. The couple were so delighted by the results of the treatment that they wrote a letter to hospital management. It seems that patients are developing a passion for non-invasive treatments such as MRgFUS."

Web site drives patient recruitment

Between 90 and 95% of patient recruitment comes from the Myomzentrum's Web site, currently ranked third in Internet search results. The use of Google Adwords has played an important role in increasing traffic to the site, which is becoming known as a powerful informational tool and source of inquiries.

Unfortunately, only a small number of gynecologists are aware of this option, according to Dr. Matzko, so few are informing patients about MRgFUS and referring them to the clinic. "When we do get referrals, we try to build relationships with the gynecologists and share information to build a common therapy strategy," he says. However, in more than half the cases, patients arrive without a gynecological referral.

Treatment success spurs reimbursement

The clinic recently signed an agreement with Debeka, a private health insurance company, after representatives paid an onsite visit and saw the treatment statistics. "The success of the procedure was very important, as the company did not want to cover a procedure that might fail," he explains. Dr. Matzko believes the excellent treatment results are largely due to the patient selection process. In his experience, about 33% of women with uterine fibroids are approved to receive MRgFUS treatment. Plus high patient satisfaction has helped establish MRgFUS as an accepted therapy option, an important step in launching a new procedure.



According to Fibroid Relief, a patient-support organization launched by the FUS Foundation (www.fibroidrelief.org), a woman must be negative for each of the following factors in order to be considered for MR-guided Focused Ultrasound. Additional medical criteria should be determined by a physician:

- Any reason to avoid MRI;
- Has surgical scarring, clips, or IUD that could interfere in the path of ultrasound waves;
- Has received abnormal PAP smear results within one year, or has acute pelvic infection, uterine cancer, or is post-menopausal;
- Is pregnant or desiring to become pregnant; and
- Has a uterus larger than the equivalent of a six month pregnancy or severe anemia.



Dr. Matthias Matzko

Matthias Matzko, MD, is the chief physician of interventional and diagnostic radiology at AmperKlinikum hospital in Dachau, Germany. Dr. Matzko received his medical degree in Radiology from LMU München and currently is the lead physician and CEO of the FUS-Center in Dachau.



About the facility

The FUS-Center, a center that is specifically focuses on providing painless uterine fibroids therapy MR-guided focused ultrasound (MRgFUS). The FUS-Center is one of the first providers in Germany to offer MRgFUS treatment to women.

Treatment success has also led the center to discuss reimbursement with one of Germany's leading public health insurers. An estimated 80% of Germans are insured under public health schemes, and Dr. Matzko expects an agreement could significantly increase the number of patients opting for MRgFUS treatment.

The future is non-invasive

With demand for the procedure expected to grow, the center anticipates providing 300 to 500 MRgFUS treatments each year. Dr. Matzko hopes to offer MRgFUS for other clinical areas that are currently being researched by InSightec, developers of the ExAblate®2000 MRgFUS system. "MRgFUS could do for men what it has done for women – offer a non-invasive, outpatient treatment undertaken in a short time," he says. ■



About ExAblate

Currently, the only FDA-cleared system for MRgFUS is the ExAblate2000 from InSightec, Ltd. To identify the treatment volume, the ExAblate uses conventional diagnostic MR images taken at the beginning of treatment. The physician delineates the tumor and defines treatment pass-zones that will avoid energy passage through sensitive tissue. The physician selects an application-specific treatment protocol that determines the main attributes of the planned treatment. The system then computes a treatment plan, composed of 20 to 100 sonication points that cover the specified target. During treatment, the system's robotic system positions the transducer below the target point and delivers the planned energy.

A key feature of ExAblate is its ability to provide real-time monitoring of energy deposition. During energy deliver, ExAblate directs the MR to continuously acquire thermal images that include the point being treated and the surrounding anatomy. These images, once processed, provide the essential feedback of where the energy is delivered and the temperature reached. This quantitative feedback allows the physician to monitor and adjust treatment parameters.

The workstation displays thermal images and compute and displays the treated regions. Spots are treated in sequence. The process of adjusting parameters and sonicating under real-time MR imaging continues until the planned volume of treatment is fully treated. Viewing images of the region immediately following treatment enables the physician to evaluate the treatment outcome.

According to sources at InSightec, over 5,500 women have been treated with ExAblate with close to 92% experiencing symptom relief.