Introduction of ExAblate® 2000 Dramatically Increases Revenues of OB/GYN Department in One Year

Early Adopter of Innovative, Cutting Edge Technology Garners Additional Patients and Revenue for Entire Department, Not Only from New Product Treatments – New Perspectives for Hospital Administrators

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Abstract

When Itabashi Chuo Medical Center in Tokyo, Japan decided to become the first hospital in Tokyo to install an ExAblate® 2000 for non-invasive treatment of uterine fibroids it did so in order to offer its patients the most advanced therapeutic technologies and to provide a full spectrum of treatment options for its uterine fibroid patients. It fully expected the number of uterine fibroid patients to increase because of the new treatment option, and in fact the number of patients treated with ExAblate 2000 was significantly higher than the total number of patients treated for uterine fibroids in the previous year.

What the department had not counted on, was that patient interest and traffic in the department would increase so significantly that the total number of uterine fibroid procedures overall carried out by the department increased by a whopping 550% in one year. This enabled them to recruit additional doctors and they are now one of the largest OB/GYN departments among private hospitals in Japan.

Figure 1. Patient treated with ExAblate 2000

Introduction

Uterine fibroids are among the most prevalent, non-cancerous growths among women around the world. In Japan, similar to other western countries, prevalence among women of childbearing age is approximately 80%. 12-28% of Japanese women suffer from significant symptoms which can include intense and excessive bleeding, pain, bloating, bladder pressure, and anemia. Depending upon the location of the fibroid, some women may have difficulty getting pregnant or maintaining the pregnancy.

Until recently all treatment options for uterine fibroids involved invasive surgeries. The most common is hysterectomy, which involves extraction of the uterus, more than a week of hospitalization and about a month of recovery. The next most common procedure in Japan is myomectomy which is also an inpatient procedure involving surgical removal of the fibroid itself, several days of hospitalization and a few weeks of recovery.

ExAblate 2000 is a new non-invasive procedure for treating uterine fibroids using MR guided Focused Ultrasound Surgery (MRgFUS) to reduce symptoms of uterine fibroids in an outpatient procedure. It combines Magnetic Resonance Imaging (MRI) to visualize the body organs, plan and guide the treatment, and monitor the treatment outcome in real time, with high intensity focused ultrasound waves which destroy the tissue. Special features, unique to the system, allow the physician to control and adjust the treatment to ensure safety and efficacy of the system. (Figure 2). Patients go home after the procedure and usually return to normal activities within a day or two.

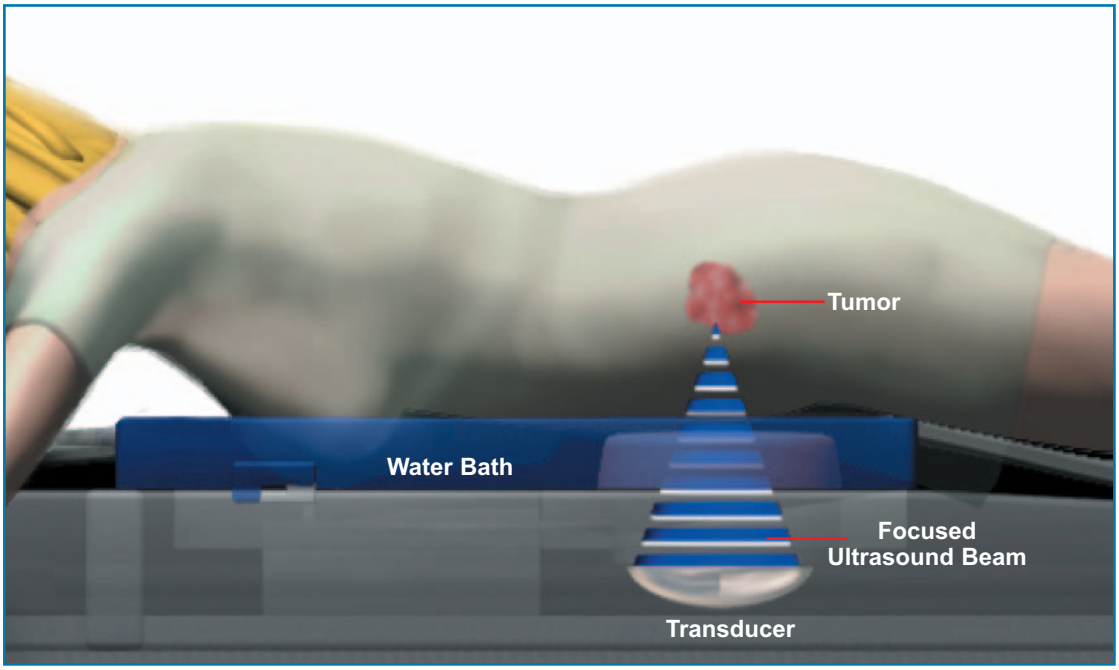

Figure 2. Focused ultrasound generates heat, ablating tissue only at the focal point. The effect is similar to a magnifying glass used to focus the sun's energy on a single point.

Itabashi's experience

Itabashi Chuo Medical Center in Tokyo is a major hospital with 579 beds and a staff of 117 physicians. They also treat about 1300 patients per day in outpatient units. In early 2004 Dr. Tetsuya Nakamura, president of the hospital, together with Dr. Yutaka Morita, chairman of the OB/GYN department, decided to purchase ExAblate 2000 and become the first hospital in Tokyo to offer this non-invasive procedure to patients at Itabashi.

"We believed that ExAblate would be a better alternative for many of the women who approach us suffering from uterine fibroids, because it is a much less drastic treatment. It preserves the uterus and enables the women to return to work quickly," said Dr. Morita, who spearheaded the drive to introduce MRgFUS technology. "In addition we felt that we could attract many new patients who would associate Itabashi with cutting edge leading technology."

Rather than rely upon word of mouth to promote ExAblate, Itabashi embarked upon an aggressive internet-based campaign to raise awareness about the procedure. "We sponsored online ads on the major search engine pages like Google and Yahoo which gave Itabashi and our department top placement on 'uterine fibroid' internet searches and helped make our hospital somewhat synonymous with the procedure here."

Results followed quickly:

In the first year, the number of patients treated in the department for uterine fibroids increased by 550%. Not only were the number of ExAblate patients greater than all the patients treated the prior year, but other treatments including hysterectomy and myomectomy increased significantly (Figure 3).

Department revenue excluding obstetric income increased 42% in one year from $330,000 per month to $470,000 per month. Additional staff was recruited to handle the additional workload, and Itabashi now has 11 physicians on its staff, making it one of the largest OB/GYN departments among private hospitals in the country.

The number of patients who were referred to Itabashi increased significantly with 70% coming from outside of Tokyo. Prior to installing ExAblate the OB/GYN department received 20 referrals per month. This increased to 110 per month, which significantly contributed to improving their hospital

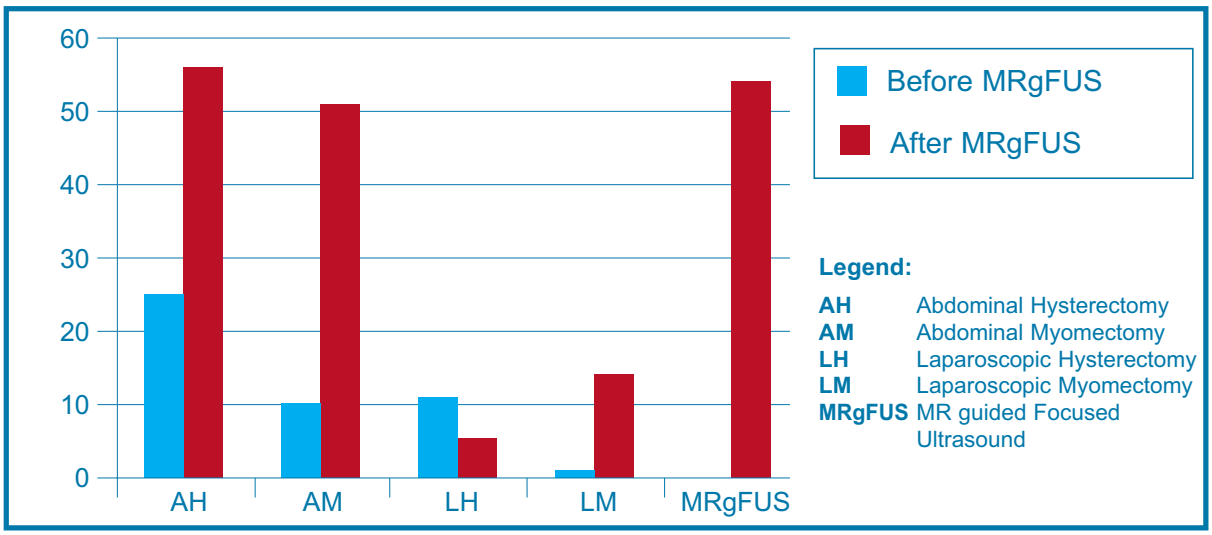

Figure 3. Uterine fibroid treatments one year before and one year after the installation of ExAblate at Itabashi Chuo Medical Center. (The number of MRgFUS treatments was limited to 50 in first year because of limited availability of MR time).

ranking. Private hospitals which demonstrate a greater than 30% referral rate receive the highest reimbursement rates from the government, which contributed to the growth in revenues.

Summary

Tetsuya Nakamura, M.D., Ph.D. president of Itabashi Chuo Medical Center, hopes the trend will continue. "Our goal is to be able to present all patients with uterine fibroids a comprehensive range of treatment options. The revenues we're generating from the ExAblate program today will help make our future fibroid program stronger and more comprehensive in the future."

ExAblate itself may eventually have additional applications. The procedure is being tested as a potential treatment for numerous oncology indications, including breast, bone, liver and brain tumors.

"We hope that our other departments will look at the ExAblate example and then adopt and promote new technologies in their respective areas, as well," said Dr. Nakamura. "Hospital administrators need to understand that embracing new technologies early on provides potential benefits that are broader than just those related to the specific product you introduce. Our goal has always been to offer patients the best healthcare possible. The success of ExAblate shows how embracing innovation not only means better medicine, but better economics, as well."

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