

Japanese Docs Demonstrate Minimally Invasive Endoscopic Breast Cancer Surgery

BY ED SUSMAN

VIENNA — Using imaging and endoscopic techniques, minimally invasive breast cancer surgery can be used to safely perform lumpectomies and other breast procedures with a high degree of patient satisfaction, Japanese surgeons reported here at the St. Gallen International Cancer Conference.

“All patients expressed great satisfaction in the procedure, and the original shape of the breast is preserved,” Kogi Yamashita, MD, Associate Professor of Surgery at Nippon Medical School in Tokyo, said at his poster presentation, reporting continuing follow-up results.

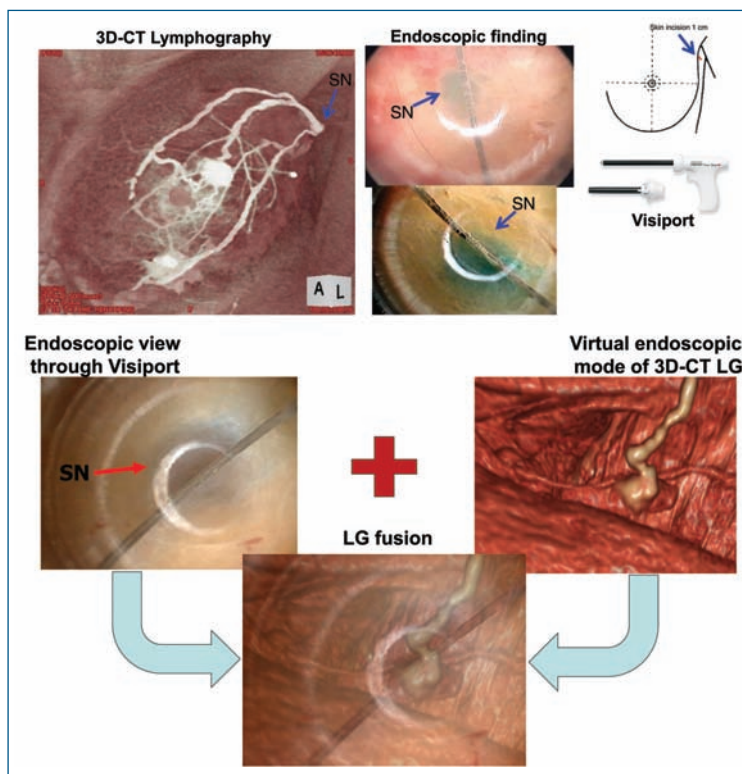
Follow-up data is now available for 160 months, with to date, three locoregional recurrences and 14 distant metastases and a five-year survival rate of 97.5 percent.

Yamashita said he has personally been performing the procedure for five years and has treated 50 women with the endoscopic procedure—“In that time, I have not had a local recurrence among my patients.”

“Conventional breast surgery, including breast-conserving surgery, makes many large wound scars on the breast with granulated ugly scars,” he explained. “We devised endoscopic video-assisted breast surgery (VABS) to perform partial and total mastectomy without any wound on the breast.”

He reported outcomes since 2001 involving 400 patients who have undergone the endoscopic procedure: “To obtain the minimum clear surgical margins and to improve the aesthetics of the breast after surgery, we tried to navigate VABS by the virtual mode of 3D-CT with endoscopic ultrasonographic probe.”

He and his colleagues use VABS to perform breast-conserving surgery,



As shown in the poster study by Kogi Yamashita and his colleagues Keiko Yanagihara and Hiroyuk Takei, the technique involves making a skin incision of about one centimeter in the axillary position, which is then marked via 3D-CT mammary lymphangiography [LG] prior to surgery; Visiport (optical trocar), which can detect sentinel nodes stained with blue dye, is then inserted endoscopically. (SN = sentinel node.)

mastectomy, sentinel node biopsy, axillary node dissection, and breast reconstructions: “We use a single port surgery that requires an incision of about 2.5 centimeter, and a smaller incision of about one centimeter is used to perform a sentinel node biopsy.”

Precise, Clear, and No Serious Complications

The virtual endoscopic mode of 3D-CT images are overlaid on the endoscopic view to navigate precise sentinel node biopsy and clear cutting at the surgical margin of the mammary gland. The endoscopic ultrasonographic probe can show the precise position of the tumor and the surgical margin from the backside of the mammary gland.

The endoscopic sentinel node biopsy was performed on 400 patients, and 3D-CT lymphography on 300 patients. “The virtual navigation helped to detect precise sentinel node locations successfully. Breast-conserving surgery

was performed on 300 patients and skin-sparing mastectomy on 50 patients.”

The research team reported no serious surgical complications among the patients treated with the procedure; in two patients there were minimally positive margins. “VABS can be considered a good surgical procedure concerning locoregional control and esthetics,” Yamashita said.

Perspectives: ‘Interesting, but...’

Still, clinicians from other countries indicated they were inclined to believe that endoscopic breast cancer surgery is not ready for prime time—and might never be.

“This is a very interesting study,” said Lauren Cassell, MD, Chief of Breast Surgery

at Lenox Hill Hospital in New York City, “but I don’t think this procedure is very practical. There has got to be a steep learning curve. Maybe after 20 or 30 cases they get good at it.”

Most breast surgeons work in conjunction with plastic surgeons in planning incisions that will have the best cosmetic outcomes, she noted. “The people who would consider doing this endoscopic procedure are already using very good cosmetic approaches. I don’t see this as a great advantage. I really don’t see this taking off.”

“The only place that this procedure is being done is in Japan,” Cassell continued. “This is technically very challenging. I find it hard to believe that the costs for this procedure, with all the equipment you have to use, would be the same as the regular procedures that we use.”

Also asked for his perspective, Louis Serurier, MBBCh, a plastic surgeon and head of reconstruction services at Netcare Breast Care Centre

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Acupuncture Relieves AI-Related Aches

BY ED SUSMAN

VIENNA—Acupuncture treatments appear to relieve the common musculoskeletal discomfort experienced by women taking aromatase inhibitors (AIs) to reduce the risk of recurrent breast cancer, researchers reported in a small, single-arm study here at the St. Gallen International Cancer Conference.

As shown in the poster study by Giovanni Giardina, MD, Senior Assistant in Oncology at Ospedale di Circolo e Fondazione Macchi in Italy, all women with self-reported musculoskeletal pain who were treated with acupuncture techniques reported improvement in pain and quality of life on validated assessment instruments.

He and his coauthors enrolled 17 women in the study, and reported on outcomes for 16, all of whom were experiencing musculoskeletal pain as a result of long-term therapy with aromatase inhibitors. The women ranged in age from 49 to 78, with a median of 62.

"All patients had a significant improvement of musculoskeletal aromatase inhibitor-related pain," Giardina reported, "and our study suggests that acupuncture may be a promising modality for relieving aromatase inhib-

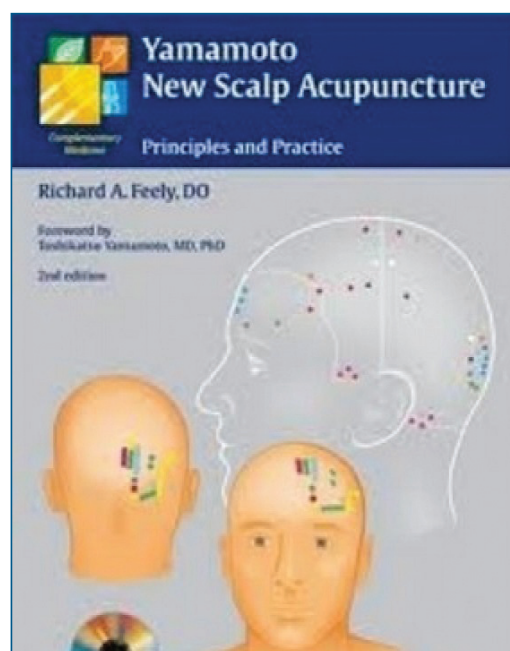
itor-related musculoskeletal side effects.

"It was quite easy to recruit women for the study because musculoskeletal pain is frequent in women taking aromatase inhibitors; the reduction of quality of life is a clinical issue and the patients have to make a choice between an effective therapy and the impairment of their daily quality of life."

He said his clinic now routinely offers the procedure to women with such musculoskeletal pain, and that there have been no significant side effects.

Giardina noted that while AIs are recommended as part of the adjuvant treatment of hormone-sensitive early breast cancer, "a consistent proportion of patients may experience musculoskeletal symptoms that can lead to discontinuation of this effective therapy or to a reduction of quality of life.

"We believe that acupuncture may be offered to all patients who experience that side effect, because is a safe and effective treatment," he said.



Cover of a book on the specific technique, published by Thieme

'Yamamoto New Scalp Acupuncture'

The Italian research team used an acupuncture technique known as Yamamoto New Scalp Acupuncture, a system of acupuncture that evolved in the 1960s and 1970s through the work

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VABS

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of Excellence at Milpark Hospital in Johannesburg, South Africa, said: "This is quite a fascinating study. As I looked at this poster, I was thinking it would be nice to work in Japan where I might have all the time and the fi-

nances to perform this type of procedure. This is going to take a lot of time to perform, and I just don't think it is practical in the environment in which I work, and probably in quite a bit of the rest of the world as well."

He said that even doing the procedure through endoscopic means there will still be a need for some form of

reconstruction. "If you are taking breast tissue out, the breast is going to look a bit off, even if there is a small incision."

Cassell said that she thinks the endoscopic procedure may be oncologically sound, but "we are only talking about 400 procedures, and that is a very, very small number." ■

Methodology

In the study, Yamashita and colleagues performed the procedure on women with a mean age of 50.2. The mean tumor size was 2.2 centimeters. About 80 percent of the women had negative lymph node involvement; 65.5 percent had estrogen receptor-positive disease; and about 25 percent were HER2-receptor positive.

A comparison of the patients undergoing the VABS treatment with patients who underwent conventional

treatments found no significant differences in patient demographics or disease characteristics.

Yamashita said the technology developed by his research team in Japan is usually employed for treatment of partial mastectomy, breast-conserving surgery. "When the tumor exists in the medial or lower side of the breast, we usually use the peri-areolar incision for the endoscopic lumpectomy, but that often makes deformation or malposition of the

nipple and the areola, and sensory disturbance around them.

"We devised the trans-axillary retro-mammary approach with VABS. We make a 3D image of the enhanced breast tumor and make a virtual endoscopic mode of it. These two images are fused to navigate. It needs only one skin incision in the axilla and can treat any tumor, even in the medial or lower side of the breast, without making any injuries on the breast skin, and it can preserve skin touch sensation."