Cyclic Mastalgia Eased by Topical Afinoxifene Gel

**Tomosynthesis May Eventually Rival Screening Mammography**

**BY PATRICE WENDLING**

**Chicago Bureau**

CHICAGO — Breast tomosynthesis was equivalent or superior to conventional diagnostic mammography in 9 of 10 women in a preliminary study of 98 women.

“The advantage of tomosynthesis is its ability to reduce or eliminate the tissue overlap and structure noise seen in single-slice two-dimensional mammography,” said Dr. Poplack of Dartmouth Medical School, Hanover, N.H.

“IT’s my own belief that not only are we going to get benefit in specificity, but we’re also going to get a benefit in sensitivity and decrease our false-negative rate,” he said.

The advantage of mammography is that it builds on a huge base of knowledge already established in mammography, so the images will not be foreign to radiologists. It requires the same amount of compression as film or digital mammography, so the discomfort is no less for the patient, however.

Dr. Poplack cautioned that the results are preliminary, and that the study was too small to identify characteristics of women in whom tomosynthesis might offer the greatest benefit.

The individual digital images are then reconstructed into a series of thin, high-resolution slices that can be displayed individually or in a dynamic cine mode, said Dr. Poplack, who serves as a scientific advisory board member for Holologic Inc., which sponsored the study.

He presented data from a study in which 98 women with abnormal digital screening mammograms were sequentially recruited and underwent tomosynthesis of the affected breasts.

Tomosynthesis images were evaluated prospectively and compared with the initial screening mammography exams showing 112 findings in the women. Tomosynthesis detected five invasive carcinomas in 4 of the 98 women, including one lesion that was not apparent on digital mammography.

As a diagnostic imaging technique, tomosynthesis was equivalent (60/112) or superior (39/112) to diagnostic mammography in 86 of 98 (80%) women, Half (49) of the women would not have been recalled if tomosynthesis had been used on the first screening.

The primary results of IBS-I, in which tamoxifen reduced the risk of breast cancer by one-third over 4 years, have been published (Lancet 2002;360:817-24). The new secondary analysis focused on quality of life issues of tamoxifen users who entered IBS-I on HT and continued it during the first 6 months.

In contrast, women in the tamoxifen arm who entered the trial on HT and continued it during months 6-12 had a 48% prevalence of hot flashes at 12 months, which wasn’t significantly different than the 51% rate among tamoxifen users who were on HT at entry but who quit using it during the first 6 months.

Among 2,658 women in the tamoxifen group who had never used HT or stopped prior to study entry, 43% were experiencing hot flashes 6 months into the study. Among those who went on HT at that point, the rate of hot flashes at 12 months was 74%, which wasn’t significantly different than the 67% rate among non-HT users.

It was quite a different story in the placebo group. One-quarter of the 2,613 women not on HT at entry had hot flashes at 6 months was 43%, compared with 65% in those who didn’t.

Physicians will need to come up with an effective therapy for cyclical breast pain and vasomotor symptoms to improve adherence.

Agents worthy of further study by dint of having mechanisms of action not mediated solely by estrogen levels include progesterone, clonidine, tibolone, some of the selective serotonin reuptake inhibitors, and black cohosh, she added.

**HT Ineffective for Hot Flashes In Tamoxifen-Treated Women**

**BY BRUCE JANCIN**

**Denver Bureau**

SAN ANTONIO — Hormone therapy is not effective for hot flashes in women on tamoxifen, Ivana Sestak, Ph.D., reported at a breast cancer symposium sponsored by the Cancer Therapy and Research Center.

This was the clear-cut conclusion of a new secondary analysis of the International Breast Cancer Intervention Study I (IBIS-I), in which 7,172 postmenopausal women at high risk for breast cancer were randomized to 20 mg/day of tamoxifen or placebo. The 4-mg dose also outperformed placebo.

The new finding is unwelcome news for women on tamoxifen for breast cancer chemoprevention who find their vasomotor symptoms intolerable. Those who don’t solve their problems by discontinuing tamoxifen have often turned to hormone therapy (HT) in an effort to find relief.

The primary end point was change in breast pain assessed by patients on a visual analog scale from baseline through the fourth treatment cycle. The 4-mg dose outperformed placebo by 25 points with 2 mg/day of afinoxifene or placebo in a double-blind study.

Mammographic breast density in the 80% range has been shown to be a biomarker conferring a four to fivefold increased risk of developing cancer. But unlike many breast cancer risk factors, breast density is modifiable.

Radiodense glandular epithelium and connective tissue also interfere with early diagnosis of breast cancer by hiding mammographic abnormalities, explained Dr. Harvey of the University of Virginia, Charlottesville.

Results of the trial were mixed. Five of 32 afinoxifene-treated patients and 8 of 29 placebo-treated patients showed a 80% baseline mammographic breast density showed at least a 10% reduction in density after 4 months, but there was no significant difference between the two groups in the fourth month at arms 6 months. Moreover, none of the 19 patients with greater than 80% baseline breast density showed a 10% improvement at 4 months. In light of the success of 4 mg but not 2 mg/day of afinoxifene in the mastalgia trial, further studies using the higher dosage are planned.

Four of five afinoxifene responders were aged younger than 40 years. This suggests afinoxifene may have potential as a chemopreventive agent in young high-risk women who avoid oral tamoxifen because of side effects.

The trials were sponsored by Ascend Therapeutics.