SWAN: New-Onset Depression at Perimenopause

BY BRUCE JANCIN

FROM THE ANNUAL MEETING OF THE AMERICAN SOCIETY FOR REPRODUCTIVE MEDICINE

DENVER – Women with no history of depression are at sharply increased risk of first-ever, clinically significant depressive symptoms during the menopausal transition, three major prospective longitudinal studies have shown.

It's a situation that requires clinicians to have their depression-detection radar fully powered up, according to Dr. Nanette F. Santoro.

"A very important thing to remember is that this type of depression is new to these women. This is their first episode. They may come into our offices clearly in distress, but they don't have the vocabulary to tell you they're depressed because they don't know what that feels like," she said in a plenary lecture at the meeting.

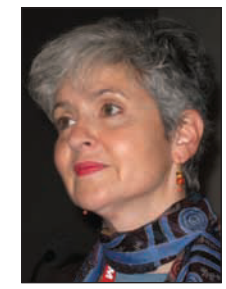
Dr. Santoro presented highlights from the ongoing observational Study of Women's Health Across the Nation (SWAN), in which 3,302 African American, white, Hispanic, Japanese, and Chinese women at seven U.S. sites have been evaluated annually since their enrollment during 1996-1997 at age 42-52 years.

"We're now in our 14th year of SWAN, and we're still cranking out data," noted Dr. Santoro, professor and chair of the department of obstetrics and gynecology at the University of Colorado, Denver.

At baseline, when the women were premenopausal, 23% had clinically relevant depressive symptoms, as defined by a score of 16 or more on the Center for Epidemiologic Studies Depression Scale (CES-D).

The other 77% of women, those with low baseline CES-D scores and no lifetime history of depression, were hit particularly hard by depressed mood symptoms in the menopausal transition. In a multivariate analysis, a woman with a CES-D of less than 16 at baseline had a 30% higher odds of having a CES-D score of 16 or greater when she was in the early perimenopausal period, which is marked by increased menstrual irregularity but at least one menses within the past 3 months.

Women in the late perimenopausal period, as defined by 3-11 months of amenorrhea, had an adjusted 73% increased odds of significant depressive symptoms, compared with those who were still premenopausal.



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DR. SANTORO

The risk was elevated even more in women with significant vasomotor symptoms (J. Affect. Disord. 2007; 103:267-72).

"That late perimenopause is just a bummer. It almost doubles the risk," Dr. Santoro observed.

The risk declines slightly to a 63% increased odds of significant depressive symptoms during the postmenopausal period.

Hormone therapy, which was used by 20% of the SWAN women, may have conferred modest relief from depressive symptoms, as HT users had a peak 64% increase in the odds of a CES-D of 16 or more during the menopausal transition.

The risk of new-onset depressive symptoms during menopause was independent of demographic, psychosocial, and behavioral factors, as well as comorbid conditions, all of which were factored into the multivariate regression analysis.

Chinese women had half the risk of depressive symptoms compared with white women, but the risk in the other ethnic groups didn't vary significantly from that in the white women.

Similar results have been reported from the Harvard Study of Moods and Cycles, in which Dr. Lee S. Cohen and his

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coworkers studied a cohort of premenopausal women with no lifetime history of major depression. The investigators found that for these women, who were less racially diverse than the SWAN women, entry into perimenopause was associated with a doubled likelihood of developing significant depressive symptoms compared with similar-age women who remained premenopausal.

As in SWAN, the risk of depression was even greater in women with self-reported significant hot flashes and night sweats.

In the Harvard longitudinal study, the use of HT didn't affect the risk of developing depressive symptoms; there was a suggestion that it might have lessened the risk of severe depression arising during the menopausal transition, although the patient numbers were too small to draw firm conclusions (Arch. Gen. Psychiatry 2006; 63:385-90).

Investigators at the University of Pennsylvania, Philadelphia, reported that women with no history of depression at enrollment in their longitudinal study were 4.3-fold more likely to post high CES-D scores during the menopausal transition than when they were premenopausal. Formal diagnosis of a depressive disorder was 2.5 times more likely to occur in the menopausal transition (Arch. Gen. Psychiatry 2006;63:375-82).

The Harvard group speculated that the increased risk for developing a first episode of depression when entering the perimenopause could be due in part to the marked sleep disruption caused by hot flashes, and/or to sensitivity to abrupt changes in the reproductive hormone milieu.

In line with that hypothesis, the SWAN investigators recently reported that higher testosterone levels appear to contribute to depressive symptoms arising during the menopausal transition.

No other hormones were associated with a CES-D score of 16 or more (Arch. Gen. Psychiatry 2010;67:598-607).

The SWAN study is funded by the National Institutes of Health. Dr. Santoro said she had no relevant financial conflicts of interest. ■

Blood Type Tied To Diminished Ovarian Reserve

FROM THE ANNUAL MEETING OF THE AMERICAN SOCIETY FOR REPRODUCTIVE MEDICINE

DENVER – Infertile women with blood type O have an increased prevalence of diminished ovarian reserve, according to Dr. Edward J. Nejat.

In contrast, the A blood group antigen, comprised of blood types A and AB, appears to be protective against diminished ovarian reserve. These are novel findings whose clinical implications must await further study, said Dr. Nejat of Albert Einstein College of Medicine, New York.

He presented a cross-sectional observational study involving 563 women under age 45 years seeking treatment for infertility at Montefiore Medical Center in New York or at the Yale University in vitro fertilization program in New Haven, Conn. Diminished ovarian reserve, defined by a baseline serum follicle-stimulating hormone level greater than 10 mIU/mL, was present in 70 subjects.

Ovarian reserve reflects the quantity of gametes available for procreation. Dr. Nejat and his coworkers decided to look for a possible association between blood type and ovarian reserve because other than advancing age, the determinants of ovarian reserve are unclear. Other investigators have previously described a link between blood type A and ovarian hyperstimulation syndrome.

A total of 61% of women with diminished ovarian reserve were blood type O, as were 43% of those with a baseline follicle-stimulation hormone level of 10 mIU/mL. After adjusting the results for age and site, women with blood type O were at twofold greater risk of having diminished ovarian reserve than were women with other blood types.

The A blood group antigen was present in 26% of women with diminished ovarian reserve and 41% of those with adequate ovarian reserve. The adjusted risk of diminished ovarian reserve in women possessing the A blood group antigen was half that in women with blood types O or B. The relationship between blood type and diminished ovarian reserve was independent of age.

Dr. Nejat said he had no relevant financial conflicts.

–Bruce Jancin