**GYNECOLOGY** 

# Breast Ca Post Pregnancy Predicts Worse Survival

#### BY SARA FREEMAN

BARCELONA — Women younger than 45 years are 48% more likely to die if they are diagnosed with breast cancer in the first 12 months after completing a pregnancy than are other young women who are diagnosed with breast cancer and are not pregnant.

In a study of 2,752 breast cancer patients who were seen at the University of Western Australia in Crawley, Dr. Angela Ives and her associates also found there was a small (3%), but nonsignificant rise in the risk of death in women who were

Major Finding: Risk of death rose 48% when women were diagnosed with breast cancer within the 12 months after a pregnancy.

**Data Source:** 2,752 breast cancer patients at one center in Australia.

**Disclosures:** Dr. Ives and Dr. Saunders reported no conflicts of interest. Financial support for the research was provided by Susan G. Komen for the Cure and the Australian National Breast Cancer Foundation.

### diagnosed with breast cancer when still pregnant.

"A possible explanation of this is that the total time a woman is pregnant, with or without lactation, correlates with increased growth of a breast cancer, and this can lead to worse survival," Dr. Ives, a research fellow at the university, said at the European Breast Cancer Conference.

Gestational breast cancer was defined in this study as breast cancer that was diagnosed during pregnancy or in the 12month postpartum period. "Completing pregnancy" included live births, terminations, and miscarriages.

In addition to pregnancy status, the researchers examined the effects of a variety of factors that could affect survival in the women studied. These included age at diagnosis, histologic tumor grade, disease stage, lymph node status, and length of survival and death status.

As expected, young age, positive lymph nodes, higher disease stage, and histologic tumor grade at diagnosis were associated with poor prognosis.

"When we looked at pregnancy status, those who were pregnant when they were diagnosed [n = 55] had similar survival outcomes to all those young women who had no associated pregnancy [n = 2,570]," Dr. Ives reported. "Those that were diagnosed in the first 12 months post partum [n = 127], after they completed a pregnancy, however, were 48% more likely to die than the women who were pregnant at their diagnosis."

Dr. Ives noted that a Norwegian registry study had recently reported similar results, although in that study the postpartum period was defined as up to 6 months after completion of pregnancy (J. Clin. Oncol. 2009;27:45-51).

"Based on this research, there are two things that we would like to see happen in research, so that we can better inform women and their treating clinicians," Dr. Ives said. "The first is to look at how the time that a woman is pregnant or breastfeeding impacts on their survival," she added. This would involve looking at the effects of pregnancy on survival from the time of conception to the time of breast cancer diagnosis.

"We'd also like to look at how pregnancy affects breast cancer cells," Dr.

> Hypothetical daily folate intake Model used for illustrative purposes only.

## EATING ENOUGH. Still not getting Enough.

### It's hard for some women to get enough folate. And difficult to tell who they are.

Even a woman with healthy eating habits may not be getting all her daily recommended folate. Surprising? It is estimated that the average diet in the United States provides about 200 mcg to 250 mcg a day of naturally occurring folate.<sup>12</sup> Only 50% of that amount is absorbed by the body, even when a woman is eating a healthy diet.<sup>2</sup> The fortification of grains and breads with synthetic folic acid has improved the folate status of some women—but up to two thirds of nonpregnant women 18 to 49 years of age in the United States have reported not consuming the recommended amount of folate.<sup>3†</sup>

This gap is worrisome because a woman with a preexisting folate deficiency who becomes pregnant may be at an increased risk of bearing a child with a potentially devastating neural tube defect (NTD). NTDs affect approximately 1 in every 1000 pregnancies each year in the United States.<sup>4</sup>

## Recommended: 400 mcg a day of folic acid, plus a healthy diet

Fetal neural tube closure occurs 21 to 28 days after conception, before many women learn they are pregnant.<sup>2</sup> Because nearly half of all pregnancies are unintended,<sup>5</sup> it is important for women to maintain an adequate folate level throughout their childbearing years. As a result, the Centers for Disease Control and Prevention and the March of Dimes recommend that all women who are capable of becoming pregnant take 400 mcg of folic acid every day in addition to eating a healthy diet, even if they are not planning on becoming pregnant.<sup>6,7</sup> Doing so may help them reach a red blood cell folate concentration >906 nmol/L, the level associated with a significant reduction in fatal NTD risk <sup>8</sup>

Ives said. In the long term, pregnancy and exp breastfeeding are known to be protective diag against being diagnosed with breast cancer, but in the short term, it seems that or is not the case and that it actually might increase the chances of being diagnosed. nee

Dr. Christobel Saunders, coauthor of the study and professor of surgical oncology at the university, commented that the study's findings do not change how women should currently be advised. She explained that the subjects were already diagnosed with breast cancer, and that the study did not look at possible causal or treatment effects. "There's an intriguing biological question now which needs to be further explored about what it is about the length of pregnancy and/or breastfeeding, or perhaps the way that the body accommodates the tumor and allows a more aggressive tumor to develop."

INCREASE KNOWLEDGE ABOUT FOLATE, ESPECIALLY IN YOUNGER WOMEN

Daily folate supplementation and knowledge of its importance remain low among women of childbearing age—especially among those 18 to 24 years of age.<sup>94</sup> This age group was also associated with approximately 46% of unintended pregnancies in 2001.<sup>5</sup> Because many women become pregnant without consulting their physician for preconception counseling, healthcare providers need to encourage all women of childbearing age—even those who are not planning on becoming pregnant—to include folate supplementation in their daily routine. Doing so may help achieve the goal of reducing fetal NTDs by as much as 70% in the United States.<sup>44</sup>

ralysis of a nationally representative sample of 1685 nonpregnant women of childbearing age (15 to 49 years of age) who participated in the National Health and Nutritic camination Survey, 2001-2002.<sup>3</sup> a stionally representative telephone surveys conducted by Gallup, targeting approximately 2000 English-speaking women 18 to 45 years of age each year. Margin of error ±3%. Reproduced from March of Dimes Folic Acid Surveys, conducted by Gallup.<sup>3</sup> Available at www.marchofdimes.com/peristats

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