

Pregnancy 'Safe' for Breast Cancer Survivors

BY SARA FREEMAN

BARCELONA — If women who have been successfully treated for breast cancer become pregnant, the findings of a large meta-analysis suggest they are not putting their lives at risk.

Indeed, investigators found some evidence that pregnancy in breast cancer survivors may confer a protective effect on overall survival.

"There is a wide perception in the oncology community that women with a history of breast cancer should not get pregnant," said first author Dr. Hatem A.

VITALS

Major Finding: Pregnant breast cancer survivors had a 42% lower risk of death, compared with survivors who did not become pregnant.

Data Source: Meta-analysis of more than 19,000 women in 14 clinical trials.

Disclosures: Dr. Azim and Dr. Dixon reported no relevant conflicts of interest.

Azim Jr. at the European Breast Cancer Conference. "This meta-analysis strongly argues against this notion."

A total of 14 trials that were published between 1970 and 2009 were included in the meta-analysis.

Together these trials involved more than 19,000 women with a history of breast cancer, of whom 1,417 were pregnant and 18,059 were not pregnant at the time of study.

Women who became pregnant after being treated for breast cancer had a 42% decreased risk of dying, compared with women who did not get pregnant (hazard ratio 0.58).

Tests for publication bias and for heterogeneity did not achieve statistical significance.

"Our findings clearly show that pregnancy is safe in women with a history of successfully treated breast cancer," said Dr. Azim of the Institut Jules Bordet in Brussels.

He described three hypotheses as to why pregnancy might have a protective effect in breast cancer survivors:

► First, there could be a "healthy mother effect," which means that the women with breast cancer who subsequently became pregnant were more likely to be healthy and less likely to experience recurrences.

Dr. Azim noted, however, that data from at least three studies controlled for women who relapsed at the time of pregnancy, and a protective effect of pregnancy was still observed.

► Hormonal effects could also be involved, with some evidence that beyond a certain threshold, estrogen has an inhibitory effect on hormone receptor-positive tumor cells.

Other hormones may also be involved, he noted, and high prolactin levels have been linked to a lower risk of breast cancer recurrence.

► Finally, there is the concept of alloimmunization, with the possibility that fetal antigens shared by tumor cells stimulate an immune response in the mother.

Further analyses of the data are planned, and will use individual patient data where available.

Dr. Azim and his associates plan to look at how age at diagnosis (less than 35 years versus at least 35 years), the time

interval between diagnosis and pregnancy (less than 2 years versus at least 2 years), lymph node status, and type of study performed (population/hospital-based versus case-control) could affect findings.

"For the time being, the take-home message is that women who want to get pregnant following breast cancer can do so—it's safe," Dr. Azim commented at the meeting.

"There are many guidelines but not much guidance," commented Dr. Mike Dixon, clinical director of the Breakthrough Breast Cancer Research Unit in Edinburgh.

"The meta-analysis is very interesting, as it does show better survival in women who become pregnant," he said, but he expressed concern that there was a selection bias in the trials and said further information was necessary. ■



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