

# Pregnancy in Former Breast Ca Patient 'High Risk'

BY BRUCE JANCIN  
Denver Bureau

SAN ANTONIO — Pregnancies in women with a history of breast cancer should be considered high risk on the basis of their increased rates of preterm birth, cesarean section, and congenital malformations, Dr. Kristina Dalberg said at a breast cancer symposium sponsored by the Cancer Therapy and Research Center.

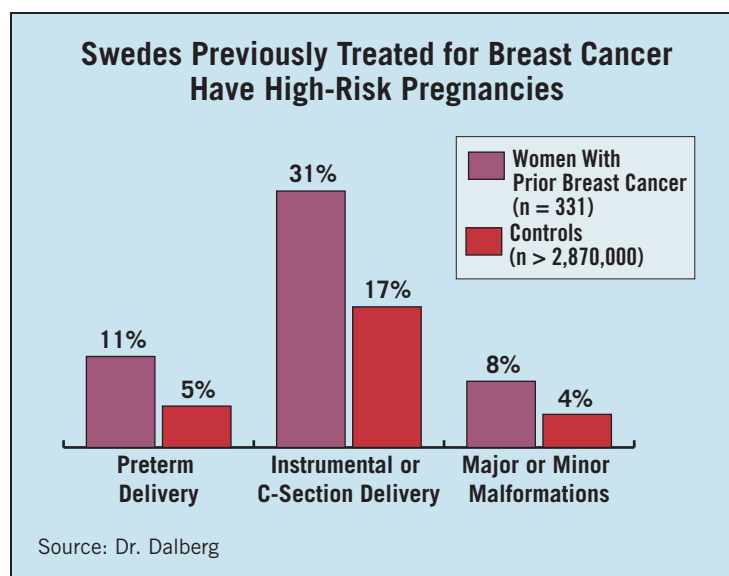
One-fifth of women with breast cancer are diagnosed before age 50, and the incidence is increasing. So data on the reproductive impact of the malignancy and its adjuvant therapies are increasingly important, noted Dr. Dalberg of Uppsala (Sweden) University Hospital.

She and her coworkers conducted a Swedish national population-based cohort study in which they cross-checked the 2,870,932 singleton births entered

into the Swedish Birth Registry during 1973-2002 against enrollees in the Swedish Cancer Registry database. In this way they identified 331 first births following treatment for invasive breast cancer. The mean time between breast cancer surgery and pregnancy was 37 months.

The former breast cancer patients were significantly older: a mean age of 34 years, compared with 27 years for pregnant women without such a history. Multiple logistic regression analysis adjusted for maternal age, parity, and year of delivery demonstrated that former breast cancer patients had a 3.2-fold increased risk of preterm delivery before 32 weeks, a 2.9-fold increased risk of low birth weight less than 1,500 g, and a 1.3-fold increased rate of C-section, compared with mothers without a history of breast cancer (see chart).

Moreover, women with a his-



tory of breast cancer who gave birth during 1988-2002 had a 2.1-fold greater risk of having a baby with congenital malformations than did matched controls. During 1973-1987, when the use of adjuvant chemotherapy in younger

breast cancer patients was less common, there was a nonsignificant 1.3-fold increased risk.

There was no increase in stillbirths among women with prior breast cancer.

Dr. Dalberg said she and her

coinvestigators had hypothesized wrongly that there would be no increased risk of adverse birth outcomes in Swedish women previously treated for breast cancer. This expectation was based in part on a reassuring recent Danish cohort study that showed no increase in preterm birth, low birth weight, congenital malformations, or stillbirth in 216 Danes with previously treated breast cancer (Br. J. Cancer 2006;94:142-6).

The discrepancy might be the result of different ways of classifying outcomes in the two national registries or differences in the use of adjuvant therapies. Additional studies in other countries are needed to resolve the discrepancy. Nonetheless, Dr. Dalberg continued, patients can be reassured that the great majority of births in women previously treated for breast cancer are uncomplicated. ■

## Manage Percreta as if It Were Pelvic Bleeding From Trauma

BY BRUCE JANCIN  
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ROME — Under many circumstances, it's just not possible to anticipate postpartum hemorrhage. However, the invasive placenta is a notable exception, Dr. Anne C. Roberts said at the annual meeting of the Cardiovascular and Radiological Interventional Society of Europe.

The most important message regarding patients with invasive placenta is to plan ahead for the possibility of severe postpartum hemorrhage, said Dr. Roberts, executive vice-chair of radiology at the University of California, San Diego.

Invasive placenta is the leading cause of emergency hysterectomy in the United States. Placenta accreta and increta are typically readily managed by the obstetrician. It's percreta that causes the most serious bleeding problems, even though it accounts for only about 5% of all cases of invasive placenta. Indeed, percreta carries a 7% maternal mortality.

"[Percreta] acts like a tumor," Dr. Roberts observed. "It's a serious problem because these patients lose an enormous amount of blood, particularly if they're not diagnosed predelivery."

"You want to treat these patients [as if] they are pelvic bleeders from trauma. We know that if you get to patients with pelvic bleeding from trauma early you don't have them going into DIC [disseminated intravascular coagulation] or needing a lot of blood transfusions. These [patients] are [similar to] trauma patients, and we need to get them in and treat them right away," Dr. Roberts said.

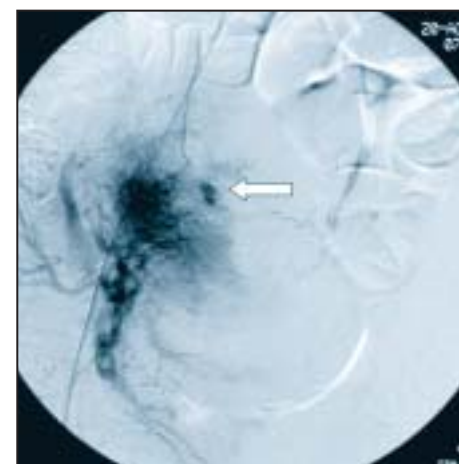
Percreta appears to be on the increase and parallels rising cesarean section rates. The reported incidence in the 1950s was 1 in 30,000 deliveries. By the 1990s, that figure had risen to as high as 1 in 2,500 de-

liveries. Although C-section is the No. 1 risk factor, D&C, myomectomy, or any other form of uterine surgery also increases the risk.

Virtually all women with invasive placenta have a placenta previa on ultrasound. If that placenta doesn't move out of the way as the patient is followed through pregnancy—and particularly if she has a history of prior C-section—MRI can be used to determine whether she has percreta.

When asked by obstetric colleagues to help manage a patient with percreta prior to delivery, Dr. Roberts' approach is to prophylactically place occlusive balloon catheters in the internal iliac arteries, leaving the balloons deflated and the guidewires in place.

Although she and her colleagues formerly arranged to have blood donated ahead of time, this measure has become unnecessary as surgeons have gained greater expertise in these cases. However, large-bore catheters are put in place beforehand for rapid infusion of fluids should this be necessary during delivery.



The arrows in each image (taken before arterial embolization) point to areas of extravasation of contrast media, which indicate postpartum bleeding.

"We don't inflate the balloons unless the obstetricians say, 'We're getting into trouble with bleeding,'" Dr. Roberts explained. "We started out inflating them as soon as the baby was delivered but found patients very quickly develop collateral flow causing bleeding, probably from the posterior division as well as from branches of the profunda [femoris] arteries."

The balloons are deflated once the invasive placenta is removed and the bleeding sites are repaired.

The value of prophylactic balloon placement was highlighted in Dr. Roberts' retrospective nonrandomized study involving 40 patients with invasive placenta. The 17 patients in the occlusive balloon group had more serious disease as evidenced by the fact that 16 had percreta, including 13 with complex percreta, compared with just 5 and 1, respectively, of 23 controls. Yet the balloon group required 28% less intravenous fluids and had less estimated blood loss.

Moreover, only 3 women in the balloon group had surgical complications such as ureteral injury or bladder puncture, com-

pared with 13 controls; this difference probably resulted from surgeons in the balloon arm feeling less rushed, she said.

Postpartum hemorrhage is sometimes treated with internal iliac artery ligation, a procedure having less than a 50% success rate.

If that fails, emergency hysterectomy is the next step. But there is a conservative option available for women interested in maintaining fertility: transcatheter embolization.

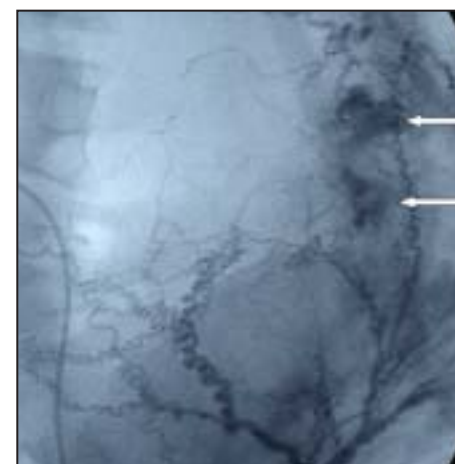
Arterial embolization is highly effective therapy for postpartum bleeding, said fellow presenter Dr. Hicham T. Abada of the University of Iowa, Iowa City.

In his experience treating 160 patients, the success rate in stopping bleeding was 94.4%. And in the few patients where rebleeding occurred, it did so an average of 6 hours post embolization. By that point, the women were well stabilized and in far better shape to undergo a second embolization procedure or hysterectomy, which six patients opted for instead of repeat embolization.

There were no deaths in this large patient series. Fifty percent of the women developed DIC, 30% developed shock, and 20% required acute massive transfusion. The mean drop in hemoglobin was 4.5 g/dL. Uterine atony was the cause of postpartum hemorrhage in 75% of cases. Thirty percent of women had a C-section.

Six subsequent pregnancies occurred in this population.

The literature quotes an 8% complication rate for arterial embolization in the setting of postpartum hemorrhage, with the bulk of adverse events consisting of contrast media reactions or relatively minor puncture site problems. Bladder or uterine necrosis has been reported infrequently; in Dr. Abada's series there were no such cases. ■



PHOTOS COURTESY DR. HICHAM T. ABADA