

One Disease, Two Lives: Exploring the Treatment of Breast Cancer During Pregnancy

**Alexa G. Visco, BA, BSN, RN, Lara C. Meyer, BA, BSN, RN,
Shuo Xi, BA, BSN, RN, and Carlton G. Brown, RN, PhD, AOCN®**

Because breast cancer risk increases with age and women in the United States continue to delay childbirth, the incidence of breast cancer during pregnancy will rise. About 10% of patients younger than age 40 diagnosed with breast cancer are pregnant. Historically, labor-delivery and oncology, the two spheres of clinical care, rarely overlapped. However, breast cancer occurs in about 1 in 3,000 pregnancies. Case studies suggest that the administration of chemotherapeutic agents during the second and third trimesters may be safe for the mother and fetus. Three specific case studies of pregnant women with cancer who received treatment are presented to identify the issues of cancer during pregnancy. Outcomes of infants who received chemotherapy in utero and associated nursing implications also are explored.

Women rarely have breast cancer and are pregnant at the same time. Obstetrics and oncology are separate healthcare services, and nurses working in one area usually do not have expertise in the other. However, at least 10% of women with breast cancer who are younger than age 40 will be pregnant at diagnosis (Woo, Yu, & Hurd, 2003). As women in the United States continue to delay childbirth until age 30 or older, the incidence of breast cancer during pregnancy will increase (Psyrris & Burtness, 2005). Nurses in oncology as well as obstetrics should be familiar with treatments for breast cancer during pregnancy and understand their responsibilities when caring for gravid women with breast cancer. This article presents current treatment in breast cancer during pregnancy and illustrates issues faced by this population with three published case studies of women treated during pregnancy (De Santis, Lucchese, De Carolis, Ferrazani, & Caruso, 2000; Giannakopoulou et al., 2000; Sekar & Stone, 2007). In addition, fetal outcomes of treatment and associated nursing implications will be discussed.

Background

Almost 6,000,000 pregnancies occur in the United States each year, and about 4,058,000 result in birth (American Pregnancy Association, 2009). Cancer is the second most common cause of death in women of reproductive age, accounting for about 33% of maternal deaths during gestation (Keleher et al., 2002). Breast cancer is the most common cancer in pregnant and postpartum women, occurring in about 1 in 3,000 pregnancies, with the average pregnant woman aged 32–38 years at diagnosis (National Cancer Institute [NCI], 2008). Maternal

At a Glance

- ◆ Caring for pregnant women with breast cancer differs from treating nonpregnant women.
- ◆ Case reports on the use of chemotherapy during pregnancy have shown varied maternal and fetal outcomes depending on trimester at time of administration.
- ◆ Nursing competency spanning the continuum of care is imperative for pregnant women with breast cancer.

age at birth continues to rise, with the average age of a primi-gravida increasing from 21.4 years in 1970 to almost 25 years in 2000 (Matthews & Hamilton, 2002). In addition, the rate of live births per 1,000 women aged 35–40 years increased from 2.1 in 1970 to 8.5 in 1999 (National Center for Health Statistics, 2008).

The risk for developing breast cancer increases with age (Centers for Disease Control and Prevention, 2007). Much of the

Alexa G. Visco, BA, BSN, RN, is a neonatal intensive care unit nurse at Fletcher Allen Health Care in Burlington, VT; Lara C. Meyer, BA, BSN, RN, is an intensive care unit nurse at the University of Washington Medical Center in Seattle; Shuo Xi, BA, BSN, RN, is an intensive care unit nurse at Washington Hospital Center in Washington, DC; and Carlton G. Brown, RN, PhD, AOCN®, is an assistant professor in the School of Nursing at the University of Delaware in Newark. (Submitted October 2008. Accepted for publication December 20, 2008.)

Digital Object Identifier:10.1188/09.CJON.426-432