

DUCTAL CARCINOMA IN SITU OF THE BREAST

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Thanks to increasing use of mammography, smaller and often pre-invasive lesions are more commonly being detected in the breast. The most common pre-invasive cancer of the breast is called ductal carcinoma-in-situ or intraductal cancer. The concern about intraductal cancer is that a proportion will progress to invasive cancer. This raises many questions about treatment.

A recent study in *The Journal of the American Medical Association* by Ernster et al has evaluated epidemiologic data from the National Cancer Institute showing a 200% increase in intraductal breast cancer for white women between 1983 and 1989. The increase in black women was 153% and in all women, the rates are increasing.

In 1992, intraductal carcinoma was said to be responsible for 12.5% of newly diagnosed breast cancers and accounts for about one-third of mammographically-detected tumors

Of early detection advantages, the authors state, "Mammographically-detected ductal carcinoma in situ lesions may contribute to reductions in breast cancer mortality, although that has yet to be demonstrated. It is clear, however that almost all women with mammographically-detected ductal carcinoma in situ undergo some disfiguring surgery for their ductal carcinoma in situ lesions (as well as considerable anxiety and some inconvenience), even though it is not known whether detection of ductal carcinoma in situ actually will extend their lives."

Using SEER program data which evaluates epidemiologic trends across the country, the authors chart 16,906 cases between 1973 and 1992; and treatment outcome between 1983 and 1992.

The intraductal cancer rates translates to an incidence of 2.4 cases per 100,000 women in 1973 and 15.8 cases per 100,000 women in 1992. For women aged 40 to 49, the increase in the first decade of study was 0.4% and 17.4% in the second decade and for women aged 50 and older 5.2% and 18.1% respectively.

Treatment changed greatly over just one decade. In 1983, 71% of women underwent mastectomy compared to 43.8% in 1992. Women choosing lumpectomy/radiation increased by 50%.

In 1992, 6,033 women less than 50 years of age were diagnosed and 2,769 underwent mastectomy. In women greater than 50 years, 7,473 of 17,375 had mastectomy.

Treatment varied greatly across the nation. In Connecticut 28.8% of women were treated with mastectomy compared to 57.7% in New Mexico.

For women diagnosed between 1983 to 1991, the survival was actually better than expected - that is to say, survival was greater than the average woman without ductal carcinoma-in-situ.

Why? As the authors noted "Relative survival could exceed 100%, as it did, if the women with ductal carcinoma in situ we studied were less likely than the women in the 1980 general population to die of other causes and/or if they were unlikely to die of their disease during the follow up period."

There was alarm noted, however, by these doctors stating "Of concern, is the continuing increase in incidence rates, especially given the relatively high proportion of cases still treated by mastectomy."

Furthermore, these authors noted that "Concerns about over-diagnosis and over-treatment of ductal carcinoma in situ may be particularly germane for women younger than 50 years, in whom a relatively large proportion of mammographically-detected breast cancers are ductal carcinoma in situ."

Of course, a major emphasis is to determine which intraductal carcinomas will progress to invasive carcinomas. Ongoing studies are attempting to administer medications to prevent the development of breast cancer.